

Children's Newspaper

The New Number of the C.N. Monthly
Out Next Week - Ask for My Magazine

The CHILDREN'S NEWSPAPER

AND CHILDREN'S PICTORIAL

The Story of the World Today for the Men and Women of Tomorrow

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THE BOY PARLIAMENTS OF CANADA

PICTURES ON A MOUNTAIN FACE SCULPTOR'S WONDERFUL SCHEME

Remarkable Idea for a Colossal Battle Scene

STRANGE PHOTOGRAPH TO BE TAKEN BY NIGHT

Is there any task so big that man will not attempt it? To judge from the task an American sculptor has just set himself it would seem that there is not.

His name is Gutzon Borglum, and he is going to carve a picture 700 feet long on Stone Mountain, in Georgia, as a memorial to the Southern Armies of the Civil War. The Southern soldiers will be shown marching across the granite face of the mountain, with their leaders in the foreground, and the figures are to be so gigantic that a horse's head will be 30 feet across.

An Unexpected Trouble

It was comparatively easy for Mr. Borglum to make his sketches and models; but when he came to prepare for the carving he found himself faced with unexpected trouble. The work was to be 300 feet up, where the mountain face is almost perpendicular, and he could find no way of sketching on it.

It would have been easy for the sculptor to lower himself down the side of the mountain and paint in his figures; but in such a position he would be too close to his work to get the right perspective, and would have to be lowered to the ground every few minutes. He first thought of sketching his figures on canvas and stretching the canvas on the rock, but the canvas would not fit closely enough and slipped out of place. He tried plan after plan without success, and finally hit on the idea of photographing his sketch on the mountain. The night should be his dark-room and the rock itself his printing paper.

Preparing the Mountain

To carry out this remarkable idea he has had a lamp made which will throw its rays 700 feet, the distance from which it is necessary to project the drawing, and a slide placed in the lamp will be magnified hundreds of times over on the mountain.

To print the drawing an area on the mountain face will be made sensitive to light by spraying chemicals on it. During the night the lamp will shine on this spot for several hours; then developing and fixing fluids will be sprayed on it, and by morning the picture will be ready for the carving to begin.

Mr. Borglum believes that if he could get a lamp strong enough he could print sketches on the moon! Some day we may have an opportunity of admiring his big picture; but it will be strange if it is more wonderful than his photography.

The Last Watch on the Rhine



The American Army has kept its last watch on the Rhine and has now left for home. Here we see American soldiers at the sounding of the last call on the banks of the river just before they set out for the coast to embark

POWER SENT 600 MILES Rescuing the Cotton Mills

One of the chief difficulties remaining for electrical engineers to overcome in sending out electric power generated from waterfalls is that of distance; the water power is often so far away from the town that transmission may present considerable difficulties, in addition to proving very costly.

A remarkable example of long-distance transmission occurred not long ago, when some of the cotton mills in Alabama were unable to get power owing to low water in the neighbouring rivers.

Electricity was transmitted from the water-power stations at Gorgas and Muscle Shoals to the mills in South Carolina, 600 miles away.

The power cables of various companies had to be connected up at different points in order to run the current through to the mills, just as various branch and trunk telephone lines have to be connected when two people far apart wish to carry on a conversation. About 35,000 horse-power was transmitted over this long line until the water in the rivers rose again.

In California current is sent from Big Creek to Los Angeles, about 240 miles.

A NEW KIND OF TRAIN Supplying its Own Power

An electric train which supplies its own power and is quite self-contained has been invented by an engineer of the South African railways for use in country where ordinary railways would be much too costly.

Mr. C. Lawson, the Superintendent Mechanical Engineer, has built a wagon which is equipped with a gas-generating plant and an internal combustion engine, which drives a dynamo and so produces electric current. The current in turn drives motors which provide adequate power for haulage requirements.

An important feature of the gas-producing plant is that it requires as fuel only the waste char, or ash, thrown out from the fire-boxes of steam locomotives, of which there is a big supply. Thus the little train can run along on rails under its own power, with no overhead wires or live rails, and can travel 150 miles on five or six bags of waste char and ten gallons of water.

It is an ideal sort of miniature train for a large, undeveloped country like Africa, and may prove the forerunner of a new type of light railway engine for many other countries.

A GREAT DISCOVERY WHAT A METAL FILM WILL DO

Tremendous Step Forward
in the Electrical World

INCREASING THE POWER OF THE VALVE

Most of us know that the valve used in wireless to-day depends on a little filament of tungsten which, when made incandescent by passing a current of electricity through it, throws off a stream of electrons.

A wonderful discovery has now been made in the research laboratories of the General Electric Company at Schenectady, where it is found that by having a trace of the metal thorium deposited on the filament the electrons emitted are about 130,000 times greater in number.

This discovery means that it will be possible to pass vastly greater currents through the valve, and even to use it for the huge currents employed in electrical engineering. A valve which will actually deal with a thousand kilowatts—over 1300 horse-power—has recently been tested with success.

A Hundred-Millionth of an Inch

This great advance in the power of the valve comes from a slight film of thorium oxide on the tungsten filament, a film only a single atom in thickness—about a hundred-millionth of an inch. Yet this infinitesimal coating of thorium increases by over a hundred thousand times the power to emit electrons!

It is a remarkable discovery, and electricians do not know yet to what it will lead, but it will simplify immediately one pressing problem of the engineer—the transmission of electric power over long distances. It will be possible to generate alternating current, send it in the form of direct current over long distances, and then reconvert it with the valve into alternating current, in which form it can be easily dealt with. Its value in long-distance wireless may be gathered from the fact that, while 200 kilowatts of energy is used today for trans-Atlantic work, five times this amount of energy can be handled with one valve of the powerful type that can now be made.

The marvellous effect of this little impurity of thorium oxide in the filament opens up many new possibilities in the great world of electricity.

FEWER BIRTHS IN ENGLAND

The birth-rate for England and Wales last year is the lowest on record except during the four war years.

It has reached the level of 20.6 per thousand as compared with 25.4 for 1920. Happily the death-rate has also fallen; but even when we allow for this there is a smaller excess of births over deaths than formerly, and if the birth-rate continues to fall, it will be a serious thing for the nation.

THE RUHR VALLEY

Results of the French Invasion

IRON FURNACES CLOSED IN LORRAINE

The French invasion of Germany—a taking of her by the throat, as it were, while saying "Pay me that thou owest"—has been gradually extended until the whole of the Ruhr industrial district is occupied by French soldiers, as well as a wide area around the district.

What has the effect been? The answer given in the newspapers differs according to the views of the particular newspaper that is read—such is the modern way of giving "news." But some of the effects admitted by the French are that, though they went into Germany to get more coal and coke, they have actually so far got less coal and coke, and many of the French iron furnaces in Lorraine have had to cease work because since the French troops went to the Ruhr they have not received enough coke to carry on with.

Unsettled State of Europe

Also, there is a general disorganisation of the railway services, and the Germans are firm in not obeying orders that do not come from their own Government.

The result for which France is working is that Germany may be so hampered and inconvenienced that she will offer satisfactory terms in order that she may be free to use her mineral resources in her own way; but there are signs that the German heart is hardening under military compulsion, and the Teutonic nature has always been obstinate.

In the meantime Europe is kept in a state of unsettlement that is worse and worse for peaceful people.

LET US BE HONEST

The Hall-Mark and What It Means

LAW AND THE COMMANDMENTS

The law of Great Britain makes provision against offences not set forth in the Ten Commandments; it guards us against fraud and untruth.

The eighth commandment says: "Thou shalt not steal." The ninth says: "Thou shalt not bear false witness against thy neighbour."

Human law goes farther. It forbids us to bear false witness about anything, and it prohibits dishonesty by false pretences and misrepresentation. A novel instance of this has just been given by a case in the Law Courts. Articles of gold and silver must be stamped. They must bear the initials of the maker or a mark showing the degree of fineness of the metal, the portrait of the sovereign, and a letter to show the year in which the hall-mark was stamped on them.

During the recent sale of an estate a quantity of plate changed hands, and when the buyer sent the silver to the Assay Office to be examined it was found that 13 articles bore false hall-marks.

A fraud was thus detected the moment an expert inspection took place.

Now the spurious goods might have been returned to the seller, and at some future time the false marks might again have led to deception. But that is not the Assay Office way. They impounded the dishonest silver and refused to release it.

"You can have these articles again," they told the owners, "if you consent to our obliterating the false marks and stamping on them the correct ones."

That is an excellent method. Expert tricksters may defraud us over pictures, statuary, or furniture, but anyone taking gold or silver to an Assay Office may know exactly what he is buying.

If only there were an Assay Office for public opinion!

FAMOUS MAN DIES IN POVERTY

HOW THE WAR CRUSHED MAX NORDAU

The Terrible Suffering of the Intellectual People of Europe

SORROWS OF A PESSIMIST

Dr. Max Nordau, the famous writer who has just died in Paris, spent the last years of his life in great poverty.

At the beginning of the war his property was confiscated by the French, and so poor was he latterly that he could not afford a visit to the country to recruit his health, and was obliged to leave unfinished a great philosophical work on which he had been engaged.

It may be said that Max Nordau was a hopeless pessimist, preaching a miserable gospel of despair, with no touch of faith and little touch of generosity in his outlook on mankind; but is that, after all, a reason why an earnest writer, with a challenging style, should starve in a world where all kinds of opinion should be willingly discussed?

Though Dr. Max Nordau was born in Budapest, his father was German, his mother Russian, his wife Danish, and his stock Jewish. He had travelled all over Europe, and when the war broke out he had lived 33 years in Paris.

The Biggest Sufferers

It seems very hard that an accident of birth should have deprived such a writer of his private possessions, and should have condemned him to a life of poverty in his old age. Science and literature do not recognise national boundaries, and few scientists and great writers have narrow national views.

Yet the sad thing is that it is the intellectual classes in all countries who have suffered most from the aftermath of the war. All over Europe able men anxious to work for the good of humanity have been hampered by a hopeless poverty that has denied them not only food for their bodies but food for their minds and apparatus for their researches.

Working in the Cold

The writer met in Berlin one of the most famous scientists in the world working in mid-winter in an unheated laboratory, and unable to carry on his researches through want of the necessary appliances.

He read in manuscript a great history of art by a writer who had died of starvation; and he found everywhere that intellectual and scientific progress and the upward march of humanity were impeded by a poverty very often approaching destitution.

And now we hear that a great cultured nation like the French thought it necessary to seize the property of a famous writer, who had made his home in their country, so that he was debarred from finishing a philosophical work into which he had long been putting the best of his thought and knowledge.

Adapting the words of a brave Frenchwoman we are tempted to cry:

"O Nationalism, what crimes are committed in thy name!"

Pronunciations in This Paper

Abacus	Ab-a-kuss
Gemini	Jem-e-ne
Lhasa	Lah-sah
Nairobi	Ni-ro-be
Papyrus	Pa-pi-russ
Titian	Tish-an

TURKEY AT BAY

WHAT IT IS ALL ABOUT

Biggest Question Ever Referred to the League

TURK'S CLAIM TO HIS WAR LOSSES

Turkey has been taking full advantage of the want of unity among the Powers who are supposed to have won the Great War, and has been seeking to regain what she lost by her support of Germany.

At the conference in Lausanne she boldly put forth claims which, if allowed, would restore her empire in the East. She has thought that Europe is not sufficiently united to resist her if she backs her claims by a threat of war.

Turkey evidently covets the subjection of the whole of the Arab world. Though the present Governments of the Arab populations exist by the voted wish of the people of the country, the Turks think the time is near when they will themselves be back as the ruling race, though they are only a small minority.

The British Foreign Minister, Lord Curzon, has taken the bold step of submitting Turkey's claim to Mosul, in Mesopotamia, to the League of Nations; and Turkey, if she chooses, may submit her claims to the Council of the League, which represents Great Britain, France, Italy, Japan, Belgium, Spain, China, and Brazil, with India and Persia also possibly attending.

Calling the World to Witness

This action by Great Britain gives the League an importance it has never before possessed, for it calls the whole world to witness on which side justice makes its plea. But what if Turkey refuses to acknowledge the League as a judge, disregards its right to delay war, and uses force to gain what she desires?

That is a possibility that brings war across the threshold of civilisation, and puts all Eastern Asia in an uneasy position. By the time this is read we shall know the decision of Turkey, and whether the world is willing to bow before her haughty claims.

The tone in which those claims have been made can be judged by the fact that she declines to allow Great Britain to control even the graves on the Gallipoli peninsula, where the sons of the British Empire lie with the honour that the world has always given to bravery.

WALTER PAGE

England's Memorial to a Great American

In a letter noble in tone and thrilling in diction—evidently the composition of Mr. Asquith—five British statesmen, Mr. Bonar Law, Earl Balfour, Mr. Asquith, Mr. Lloyd George, and Lord Grey of Falldon, appeal for a British Memorial to Mr. Walter H. Page, "the great American Ambassador in this country during the war."

No doubt the memorial will be erected as a sign of the British nation's gratitude and admiration in the only temple sacred enough for such a memory, Westminster Abbey, a shrine that appeals by right to the American as well as the British people.

Walter Page was a great man. Unaware of what he was doing, he told his story from his heart in letters sent home during the acutest agony of the war. No one can read these letters without feeling the presence of one of the choicest spirits the world has known. He it was who guided the right hands of America and Britain till in the midst of strife they clasped in closest friendship.

He was so large of heart, so broad in judgment, so swift and deep in intuition, that he understood all that was most vital in that time of trial for nations. If ever a man deserved to win love by love that man was Walter Page, and our country ought to keep his memory "aye, in her heart of hearts."

PAYING OUR DEBTS

THE HARD CASE OF GREAT BRITAIN

Paying Back the Money We Borrowed for Others

HONESTY OF NATIONS

By Our Political Correspondent

The least that can be expected of any man who claims true manhood is honesty. We may not demand from him generosity, but he cannot evade honesty without blotting his character. Much more then ought a nation, acting unitedly, to pay debts contracted with other nations.

Just now national honesty is on trial. Great Britain stands the test, of course. No one would expect otherwise. No British voice is raised against paying what we owe America—\$850,000,000—though the bill is heavy, and the terms on which our debt will be discharged are heavier than had been hoped for.

Interest on the Debt

Those terms are that in the next 62 years we must pay off the money borrowed from America during the war. During the preliminary years, before a fixed arrangement has been made, we must pay interest at 4½ per cent., for ten years at 3 per cent., and afterwards for probably 52 years at 3½ per cent.

It means that if the payments to America were equalised over all the families in Great Britain—which will not be the case—every family would have to pay a shilling a week throughout this and the next generation.

This is the extent of our debt after our American friends think they have treated us with rather generous consideration. They assume, we may suppose, that the nations for whom we borrowed this money—for we borrowed it on behalf of our Allies—will pay us in due course. But will they? Are they making arrangements to pay us as we are making arrangements to pay our American creditor?

France's Growing Debt

No such arrangement for repaying us is in sight. The national fashion at present seems to be to say, "We cannot pay." Germany says it to France. France does not say it to us, but she takes no step toward paying. On the contrary, she is increasing her debt year by year in two ways.

She is not taxing her people sufficiently to meet her ordinary yearly expenses, and a parliamentary commission which has considered her growing debt has declined to recommend such an increase of taxation as would enable her to pay her way now. Besides that, she is piling up more expense by sending her army into Germany.

If this goes on there can be only one end to it, which is that presently France will not be able to pay her debts.

Why is it that France evades the taxation that is absolutely necessary? It is because her present Government shirks the responsibility of facing the unpopularity that would follow higher taxation—such taxation, for instance, as the British people are now bearing with a fair degree of patience.

Britain's Heavy Taxes

The facts are that Britain, having borrowed money for France from America (who would not lend it to France direct), is taxing herself higher than any other nation on Earth to pay her debts, while she sees the daily ruin of the trade on which her life depends; and that, while other nations squander money on militarism, the British people must toil to pay the cost of their adventures.

France does not face the facts. We state them here because it is right that all people should know them. The people, alike in France and in Britain, are the real rulers of the nation. They are responsible. They should know at once the truth which, sooner or later, will make itself felt.

INDUSTRY THAT GREW LIKE MAGIC HOW BRITAIN LED THE WORLD

Wonderful Lancashire and Its Wonderful Trade

THE GREAT IMPORTANCE OF COTTON

By Our Economic Correspondent

Although the world's trade in cotton is not so great now as before the war, its dimensions are still wonderful. Even in the past year, despite the evil effects of the war on commerce, something like 8500 million pounds weight of cotton was used by the world.

This enormous trade is almost entirely the growth of the last hundred years, and yet cotton was known to the people of ancient times.

A World with Little Cotton

Pliny, who lived in the opening years of the Christian era, and who loved to record all he saw—and much that he did not see—of natural history, wrote of the cotton plant as a bush bearing a fruit out of the husk of which "the downy cotton breaks forth, which is easily spun, and is superior in whiteness and softness to any flax in the world."

In spite of its many virtues, however, the world grew and used little cotton until machinery came.

Then consumption went ahead like magic, especially in our country, where the steam-engine and the power loom were invented. By 1801 Britain consumed 54 million pounds in a year. In 50 years this consumption grew to 660 million pounds. By 1900 it rose to 1500 million pounds, and when the war broke out we were actually using about 2000 million pounds in twelve months.

What Cotton Means to Britain

This growth meant more to us than is commonly realised. It is not merely that cotton goods are so valuable to use on our persons and in our furnishings. Our cotton sales abroad are so important that under normal peace conditions they actually account for a quarter of our entire exports.

That is to say, of all the British goods that we exported in the year 1913, one pound's worth in every four consisted of cotton yarns and fabrics produced in Lancashire. These cotton exports paid for about half of all the raw materials of every sort that we brought into the country that year.

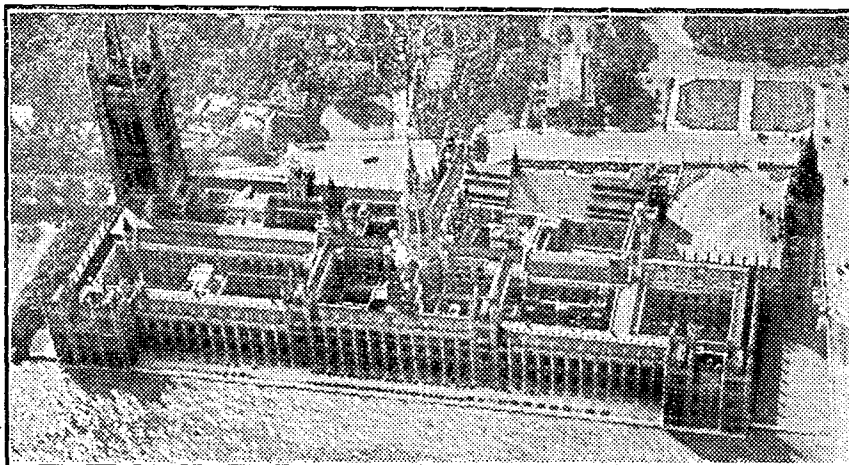
We can understand, then, how all-important it is to the country to maintain this wonderful trade. Can we do it?

130 Million Spindles

In the old days Britain had most of the cotton-mills of the world. But, of course, though cotton machinery was a British invention, the secrets of machine cotton spinning and weaving could not be kept here. The British engineers who made cotton machinery naturally were glad to find foreign customers as well as British ones, and cotton mills sprang up all over the world.

So the cotton manufacture spread and flourished in most countries, and at the present time there are about 130 million cotton spindles at work in the world. Of these we possess about 51 millions, and the United States about 36 millions, leaving 43 millions for all the other nations. The other big cotton-manufacturing countries are France, Germany, Italy, Czecho-Slovakia, India, and Japan. So badly has the cotton trade been hit by the war that many of the spindles are working short time. It is a thousand pities that so valuable and useful a trade should thus be held up, but such are the inevitable consequences of war.

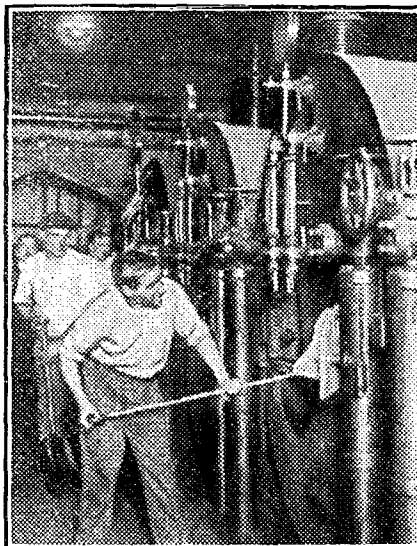
NEW VIEWS OF PARLIAMENT HOUSE



Looking down on the Houses of Parliament, with the Thames in the foreground



Election ballot papers being stored in the Victoria Tower



The furnaces that keep the Houses of Parliament warm in winter



The beautiful cloak-room provided for the use of Members of Parliament

Everyone knows the Houses of Parliament as seen from the river or street, but here are some less familiar views inside and out. The top photograph was taken from an aeroplane, and the second picture shows what happens to the voting papers after an election. They are all taken to Westminster and carefully stored in the great Victoria Tower for some time before being eventually destroyed.

CHIEF SCOUT'S COLUMN

BOY STOPS AN ENGINE

How a Scout Saved the Driver's Life

LEARNING HOW THINGS ARE DONE

By Sir Robert Baden-Powell

A Scout saved a man's life not so very long ago, and I will tell you how he did it.

The man was driving a traction engine, and got his clothes caught in the machinery. He was being dragged to his death when a Scout promptly jumped on the engine, pulled the levers, and stopped it.

Now, an ordinary boy or girl perhaps regards an engine as a thing that moves for reasons best known to itself and its driver, and would have known nothing about why it worked, or how. But a Scout, when he sees a thing working, wants to know *how it works*, so he takes the trouble to learn about it.

Doing Something Big

A Scout also makes up his mind as to what is the right thing to do, and does it quickly. In this case, he saved a man's life, which was a big thing to do.

To earn his engineer's badge a boy must have a general idea of the working of motor-cars and steam locomotives, marine, internal combustion, and electric engines. He must know the names of the principal parts and their functions in any machine chosen by himself, and how to start, drive, feed, stop, and lubricate it.

It sounds a lot to know, but engineering is a fascinating hobby once you begin to study it; and it is a very useful one, as this story shows.

One of the chief things that we try to teach Scouts and Guides is the art of observation. If you can observe things around you, and wonder about them, you are half-way to knowledge, and it is a long way more interesting than reading books about things you have never noticed.

Do You Know These Things?

I wonder how many of you, for instance, could tell me anything at all about the working of these very ordinary everyday things: the telephone, the old-fashioned windmill, an artesian well, a threshing machine, or even an ordinary motor-car.

How many of you in a country walk can recognise a willow wren, a tree creeper, or snipe; or tell a beech tree from a hornbeam even in its summer dress?

You who read this are particularly lucky, because in the C.N. and My Magazine, and also in the Children's Encyclopedia, you can read and see pictures, and so learn about most of these things. But if you have never noticed them out of doors they will not interest you in the same way.

Keeping the Eyes Open

I believe, however, that a large number of you are Scouts and Guides, or Wolf Cubs and Brownies, and you are supposed to walk about with your eyes open. By doing so you will not only have a much more interesting time yourself, but you will avoid giving unnecessary trouble to other people.

I have noticed, for instance, that some people when travelling seem to think that anybody wearing a certain type of hat must be a porter, and will therefore know all about the train, its stopping places, time, and so on.

It does not occur to them that the man may be a chauffeur, or a book-stall clerk, or a naval officer. His hat has a peak and he is on the platform, and so they seem to think that if he is not a porter he ought to be.

AN ISLAND TILTS OVER

WHAT THE SEISMOGRAPH FOUND OUT

Tides That Seem to Rise in a Tideless Sea

A MYSTERY OF MALTA

Malta has been shocked by a series of earthquakes, not serious in result, but sufficiently terrifying to send the inhabitants shrieking from their homes out into the streets.

This brings back to mind some strange discoveries made in Malta 17 years ago, finds as astonishing as anything science has recently revealed to us.

The sea that washes the coasts of Malta is tideless; yet observers noted from time to time that what seemed to be tides did occur.

"But you cannot have tides in a tideless sea," they were answered.

"Very well. If the sea does not rise and fall then the island does!" the watchers replied.

The effects were too curious and disturbing to pass without further comment. A seismograph, an instrument for recording earthquake movements, was set up in the dockyard, and it undoubtedly lent support to the theory of tides—but not in the sea!

A See-Sawing Island

A second and more refined instrument was next fixed to the foundation rock of the university, and then the story was out. Malta tilts!

Rising from a huge submarine plateau of rock, the island periodically sways from side to side. The recent earthquake tremors are evidently only an extension of the same movement. Not the faintest suggestion of danger is feared, but it is a curious fact that the Mediterranean fleet of the British Empire has its headquarters at an island which is given to see-sawing.

But there is the island today, as it has been as far as the knowledge of man reaches back into the past. Nation after nation has possessed it in turn.

There were people in Malta who wrought great works in stone before they knew the use of bronze and iron. They had done wonderful things in Malta before the Phoenicians arrived to take possession, and that was 3000 years ago, when Pharaoh Tutankhamen flourished in Egypt.

Temple Built by Women

Then came the Greeks; and Carthage, Phoenicia's far mightier daughter, had Malta for a colony. Then the Romans, 200 years before they knew of Britain, established themselves in this Mediterranean fortress-paradise; Goths, Vandals, and Moors followed.

The native language is a curiosity. It is a mixture of Arabic, Punic, and Italian. The Italian is a relic of Rome, the Arabic a memory of the Saracens, but the Punic is the language of Carthage. The tongue that Hannibal spoke survives, in fragments, in Malta, and his name, and that of Hamilcar, his father, are borne by Maltese today.

The excavations in Malta reveal unsolved mysteries. Last year Miss M. A. Murray discovered what she believes to be a series of small stone temples. One of these, the local tradition runs, was built by the prehistoric island women.

A FEW BOOKS PLEASE

A Red Cross Appeal

The British Red Cross and Order of St. John is appealing to good people to send any books for children that they can spare to the Hospital for Sick Children. Books can be addressed to The Secretary, the Hospital Library, 48, Queen's Gardens, Lancaster Gate, London, W.2. The children have no books now, and want them badly. Will some C.N. readers help them, please?

STRANGE FIND IN A BARN

Rat's Grim Struggle Against Starvation

SURVIVAL OF THE FITTEST

We all know that the brown rat is an alien; it drove out the old black rat which was formerly in possession here. Something that has just happened in a barn at Atherstone, in Warwickshire, gives us a clue to how it carried out its invasion.

The barn was emptied by a farmer and was locked and deserted for months. Now, re-opened for fresh use, it reveals a grim lesson in natural history.

When the barn was cleared last summer 29 living occupants appear to have been left behind in it. One was a rat; the remainder were mice.

Apparently there could have been no way out for the prisoners, and they were brought face to face with starvation. The rat ate the mice. There are the skulls and broken remains of the little creatures.

With the last mouse dispatched, the rat's turn to starve came, too, and his carcass was also found when the barn was re-opened.

Now, in the fight between the brown rats and the black, the brown were much the stronger. They killed the black ones and ate them, and only a few escaped. Then they reigned in their place.

The story of the brown rat is a case of the survival of the fittest; the story of the rat which ate the Atherstone mice was another, until starvation came and laid him low.

Of course, survival of the fittest does not always mean that the fittest is the creature which kills its rival in combat. The victory may be gained by greater strength, skill, and cunning; it may result from greater ability to resist disease and hardship.

But in its fiercest form the fight for survival ends with a death grapple, and the rat in that silent barn tells us how life in the wilds has been carried on since the earliest time.

NEW STAMPS

Changing With Events

Stamp collectors and others will be keenly interested in some new series of stamps that are soon to be issued.

Both Mesopotamia and Palestine are to have new stamps, and the tiny Pacific island of Nauru, which was formerly part of the protectorate of New Guinea, is to have a new set with the design of a ship. The Union of South Africa has also chosen a new series of stamps showing pictures of the life in South Africa.

New Egyptian stamps are to be issued with the head of King Fuad as well as a picture of the pyramids.

Many European countries are preparing new stamps this year, and we may expect to see fresh designs from Italy, Spain, Holland, Greece, and Jugoslavina.

£50,000,000

A Red Indian Claim

The Cherokees, the Choctaws, and other tribes of Indians are laying claim to a huge tract of land in Texas valued at about fifty million pounds. The land is dotted with flourishing villages, and is in the heart of a gold-bearing district.

The Indians base their claim on a treaty signed nearly ninety years ago between the chiefs of the Indian tribes and commissioners of the Texas Republic. The treaty was not kept by the Republic, and when the Indians protested they were driven out of the territories by military force, and received no compensation.

Now they claim the land and maintain that they have a right to sue the State of Texas as successor to the old Republic.

FLYING WITH HELIUM

40,000 Cubic Feet a Day in Texas

CANADA'S RICH SUPPLIES

The rare and light gas helium has had an interesting career, and has risen rapidly in the world.

It was first detected in the Sun by Sir Norman Lockyer, then it was found by Sir William Ramsay in cleveite, and finally it was proved to be one of the products of the break-up of radium, and the brick out of which all the more complicated atoms are built. It is now known to exist in minute quantities in the atmosphere, and to be contained in several natural gas supplies.

Being the lightest gas known except hydrogen, and incapable of chemical combination, it is plainly the best gas for airships, and endeavours have been made, as C.N. readers know, to separate it from natural gas for that purpose.

In America helium-bearing gas is found widely distributed in Texas, Oklahoma, Kansas, Illinois, Ohio, Pennsylvania, New York, Indiana, Kentucky, and West Virginia, and it has been estimated that more than five hundred million cubic feet of helium are being discharged every year in these areas.

In Texas, during the war, great works were built to deal with some of the natural gas in that State, and a report has now been issued by Dr. Richard Moore, Chief Chemist of the United States Bureau of Mines, stating that the plant is now producing about 15,000 cubic feet of helium a day, and will eventually reach about 40,000 cubic feet.

It is probable that no other gas will ever be able to take the place of helium for filling airships, and therefore it is satisfactory to know that the British Empire has also its helium-bearing gas in Ontario and Alberta, and that it has been estimated that they could produce ten or twelve million cubic feet a year.

12,000 MILES FROM HOME

And a Happy Reunion

Seven years ago Mr. Saffar, a Russian, went to Australia to make his fortune.

At the outbreak of the war he enlisted, hoping to be sent to Russia, so that he might be near his wife and three children. But for seven long years the family were separated.

Mrs. Saffar supported herself, until driven out by the Germans, in a town called Goldingen, in the old Russian province of Courland, where she was born. With thousands of others she was sent to Brodijansk, a village in the Crimea. There she lived in terror. One day the village was pillaged by the Bolsheviks; the next by their enemies. Then her mother was killed, and soon after her little boy died from starvation.

For the sake of the other two children the grief-stricken mother struggled on. Food was so scarce that horse-flesh was a luxury. Once Mrs. Saffar begged two beans, and boiled them in water that her children might live. The children around were dying in hundreds.

At Smolensk the little family found shelter in a disused railway carriage, and there the children made up cigarettes and sold them to passers-by.

But at last, aided by a traveller, Mrs. Saffar got in touch with the British Consul, and her passage was booked to Australia. Now the family are united, and are living happily in Sydney.

EARLY STARLINGS

A New Year Nest

What is the record for the early nesting of starlings?

A reader of the C.N., whose schoolmistress certifies the accuracy of the statement, relates that in Roxburgh County, early in January, a nest containing five young starlings was found in a hole in a birch tree.

FUNGUS AND ITS WORK

HELPING HANDS IN THE PLANT WORLD

How a Humble Parasite Gives Us Flowers

FEEDING THE TREES

We often hear of birds, beasts, and fishes cooperating to do each other a good turn, but it is a wonderful thing to remember that for every instance of animals helping each other there are many more in the plant world. How many of us know that a lowly fungus gives us some of our finest flowers?

Orchid seeds differ from all other seeds, as they contain, when ripe, not a tiny plant, but a mass of tissue; and, though the seeds are produced in tens of thousands, for a long time it was found a hard thing to make them grow; the reason being that the hothouse orchids lack a fungus which normally grows in the orchid tissues and assists seed germination. Measures accordingly have to be taken to supply the missing fungus.

Silky Mantle on a Tree

Thousands of glass flasks containing fungus growing on sterile jellies are laid out on the hothouse benches, and in these the orchid seeds are sown. In a few days the fungus threads penetrate the tissues, and almost immediately the seeds begin to grow; finally the healthy seedlings appear.

It seems that as each root springs up it is separately infected by the fungus, and that the fungus threads help the orchid to suck up the decaying plant matter on which it feeds.

Similar threads are found on the roots of forest trees, such as pine and oak, surrounding them with a fine, silky mantle, and botanists have recently been studying the relationship between the fungus and the trees. Some think that there is a very intimate connection between the two and that both benefit greatly; but others look on the fungus as a parasite which may do great damage to the roots. There seems to be no doubt, however, that the fungus has merely taken over the duty of supplying the tree with minerals and water as did the fine root hairs it has displaced.

A Neglected Family

In a normal plant the fungus quickly penetrates the roots, stem, leaves, and flower, and also infects the surrounding soil. When the fruit is forming the fungus threads enter it and infect the coat of the seed, so that when the ripe seed falls to the ground it carries a little bit of fungus with it. This enters the new seedling as soon as it begins to grow, and so brings life and vigour to generation after generation of new plants.

Recently the common heather, or ling, was also examined by botanists, and it was found that when it grew apart from its fungus it put forth a few sickly-looking leaves, but no roots.

The fungus family is immense, and its members are found everywhere, but up to now botanists have neglected them for the more beautiful flowers. Yet in the plant world they seem to do almost the same valuable services as the ants do for their bigger masters.

It would be tremendously interesting to find out the real place of the fungus in the story of the plants and trees.

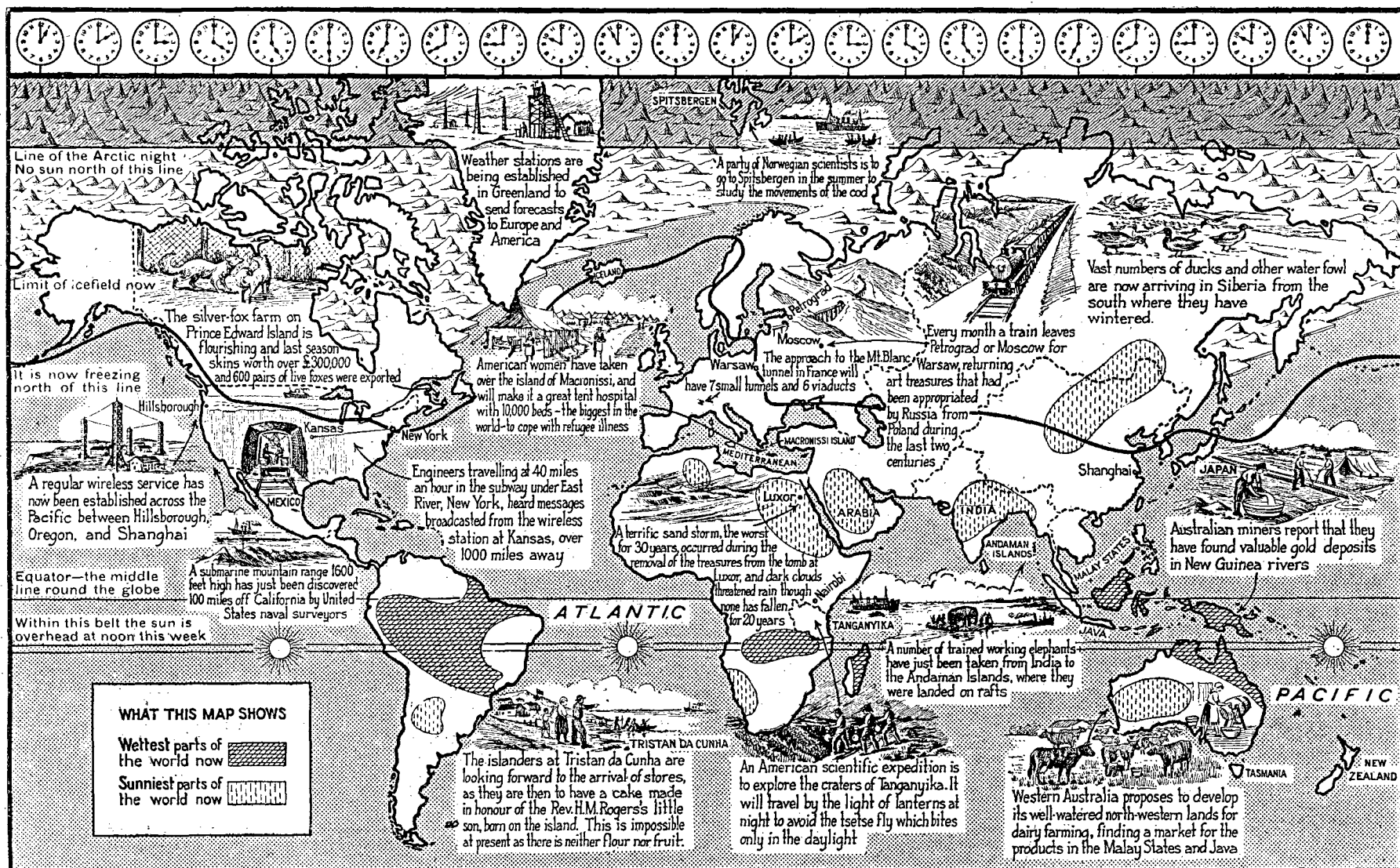
NEW YORK'S SPECIAL TRAIN

Spring Clean-up in the Subways

For the first time in nearly twenty years the subways of New York are to be thoroughly cleaned.

This is to be done by running a special train through the subways at high speed. The first car blows out air at a tremendous pressure and dislodges all dirt from walls and crevices. The second car is equipped with vacuum openings, into which the loose dirt is drawn.

PICTURE-NEWS AND TIME MAP SHOWING WEATHER ALL OVER THE WORLD



THE UNDERGROUND FIRE Smoke Escaping from the Earth A SHREWSBURY MYSTERY

At Bank Farm, near Shrewsbury, a considerable area of the earth some feet underground has been, on fire, and smoke came out of little chimneys here and there.

It seems probable that a layer of brown coal or lignite, which is an intermediate stage between wood and coal, has caught fire, owing to the oxidation of its carbon. It is well-known that some forms of carbon formed by heating in the absence of oxygen will catch fire when brought into contact with oxygen, and the combustion in this case may have originated thus.

The fire has been creeping beneath the fields for some time. Smoke escapes from the ground in wisps. Sticks thrust into the earth become charred. At night a reddish glow is seen. Men have dug deep, but reached no flames. They have thrown gallons of water, that have sizzled and have had no other effect. Sightseers come from far and near, some of them predicting the end of the world.

This recalls the pretty fancy in Ebenezer Jones's poem about the beginning of the end:

When the world is burning,
Fired within, yet turning
Round with face unscathed.

At first, he says, men will continue their work and play in ignorance:

And the woodland haunter
Shall not cease to saunter
When, far down some glade
Of the great world's burning,
One soft flame upturning
Seems, to his discerning,
Crocus in the shade.

We expect that the fire will be put out long before Shrewsbury sees the flame flowers of the poet's fancy.

NAPOLÉON'S CARRIAGE Relic from the Battlefield of Leipzig

We so often see pictures of Napoleon on foot and on horseback that it is difficult to imagine him directing his armies from a carriage. But the ownership of the travelling carriage in which he did much of his campaigning has just been contested by three nations.

It was left by Napoleon on the battlefield at Leipzig, where he was crushingly defeated by the combined Prussians, Russians, and Austrians, and it fell into the hands of the famous Prussian field-marshal, Blücher. Blücher left it to his descendants, who sent it to the family estates in Bohemia.

It is not surprising that France should have claimed the carriage after the war; but it was also claimed by English descendants of Blücher, and it has just been awarded to them by the Supreme Court of Leipzig.

But, curiously enough, its new owners have decided not to bring it to England, but have presented it to the city of Breslau; so that Germany will keep her trophy, after all.

WOOD FROM GRASS As Hard as Ebony

A process has just been discovered by which imitation wood can be made from cellulose, the prime constituent of wood, grass, straw, and every useless weed.

The artificial wood is as hard as oak or even ebony, and can be worked in the same way. It can be dyed any colour, and when made up and polished exactly resembles wood.

It has the advantage of being extremely cheap, and is not nearly so inflammable as real wood. It is a good insulator, and may find a wide application in electricity.

BALL OF LIGHTNING Floating Through a Window

Sheet lightning and forked lightning, the lightning that falls "with many a jag," are familiar to everybody. Ball lightning, however, is rarely seen, and its nature and conduct are still a mystery.

Ball lightning is usually described as a globe of dazzling light moving slowly along, and it has been seen sometimes floating in through doors and windows. Usually it explodes with a bang, but it seldom does much damage, though the ball is often about the size of a football.

Professor MacGregor-Morris, lecturing in London not long ago, stated that one of his students had seen such a lightning ball rolling through the door of his house, along a passage leading to another door, where it burst on a mat with a loud report. These balls seem to be drawn along by a draught, and Professor MacGregor-Morris warned his hearers that if they ran away from ball lightning the ball would probably run after them, because of the draught created.

ESCAPING EXTINCTION Hope for Canada's Antelope

For some years the antelope in Canada has been threatened with extinction.

Ten years ago it was estimated that there were 2000 wild antelopes in Western Canada. Today there are reported to be only 1250, and some years ago they entirely disappeared from the province of Manitoba.

The extermination of such a beautiful and graceful animal would be a tragedy, and five years ago the Government started a preserve of 50 animals. The preserve is known as the Nemiskam Park, and covers nine square miles. Happily the herd was kept free from disease, and the 50 animals have grown to 130, so that it looks as if the Canadian antelope is likely to escape extinction.

WAR ON SLEEPING SICKNESS

Curious Grass That Tsetse Flies Dislike

WILL IT DRIVE THEM AWAY?

It is comforting to know that day by day scientists are searching for new and better ways of fighting disease. The latest piece of good news in this field comes from Africa.

In Africa the tsetse fly carries the microbes that cause sleeping sickness in men and a deadly disease in animals.

When it bites infected men or beasts the tsetse fly imbibes the microbes, so that if it then bites healthy men or beasts it inoculates them with sleeping sickness.

As it is impossible to kill all the tsetse flies or every infected animal it seemed impossible at one time that the disease could be extirpated; but an important discovery has now been made which renders the position much more hopeful.

It has been found that an excellent fodder plant called efwatakala grass, or stink grass, which grows on cleared areas, has the property of driving tsetse flies away. This grass secretes drops of an aromatic oil by means of hairs on its stem and blades, and it is the peculiar odour of the oil that the flies dislike.

The natives of Portuguese Congo have found that it also drives away fleas, and they use it for nests for their fowls and litter for their dogs.

Efwatakala grass is now being cultivated for study at Kew, and its seeds are being sent to Nigeria and Uganda.

There seems some reason to hope that if it can be grown on a sufficiently large scale, it may do good work in stamping out the deadly tsetse fly diseases. At the same time it will make fine fodder for horses, mules, and cattle.

CHILDREN'S NEWSPAPER

FEBRUARY 10 1923

Every Consequence Has a Cause

ONE of the proudest boasts of science is the claim that it has drawn up a table of Cause and Effect whereby man may master Nature.

Before science came man was the dupe of fear and superstition. He could not tell how things happened. Everything in Nature seemed a miracle to him. On all sides he felt himself surrounded by mysterious powers, and most of these powers seemed to him cruel and malicious.

For thousands of years man attempted to appease the wrath of these invisible powers that shaped his destiny. Even to this present day there are many millions of human beings who offer sacrifices to cruel gods simply because they have never traced effects to their causes.

But for educated people there is now no feeling that the world lies at the mercy of caprice. All things are linked together. All Nature is ruled by law. Every effect observed by man has an intelligent cause.

Now notice a very strange thing. Even among the most brilliant men of science in Europe, even among her philosophers, her statesmen, her great journalists, and her spokesmen of religion, there seems to be no knowledge that in the moral sphere, just as in the natural sphere, every effect has a cause. They are just as ignorant and superstitious here as the darkest savage. They behave like heathen. Many of them talk like lunatics.

Take the desire for Peace. Everyone wants peace. Europe is perishing for want of it. And yet the rulers of the world and the moralists of the world behave as if love and goodwill have nothing whatever to do with peace. They behave as if peace is a consequence of rivalry and hatred. As well might a man of science teach that the way to grow bread is to plant brambles.

One of our noblest poets has made this simple prayer: "God help us, and enlighten us for the time to come, that we may not stand in our own way so much, but may have clear notions of the consequences of things." Not yet has humanity learned to say this prayer. Not yet does it perceive that it is standing in its own way; not yet has it a clear notion that, while peace is the consequence of love and goodwill, war and ruin and death are the consequences of angry hearts.

Perhaps we must wait for the present generation of children to grow up before the world sees that there is a cause for every effect in the moral world. Each one of us who sees this truth, and lives by it, may help to do a great work for mankind. We perish for lack of understanding.



THE EDITOR'S TABLE

Fleetway House, Farringdon Street, London

above the hidden waters of the ancient River Fleet, the cradle of the Journalism of the world



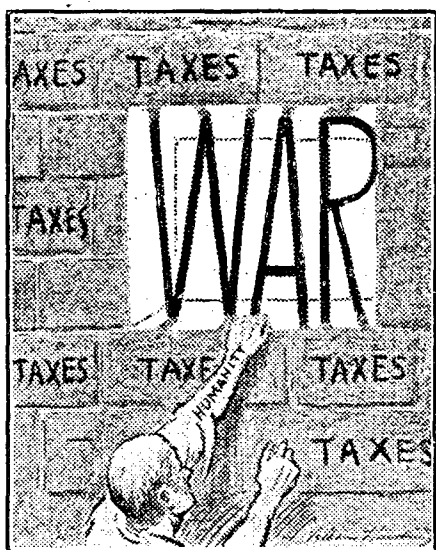
A Bishop Speaks

THE Bishop of Chester has raised quite a whiff of whirlwind by saying that a parade of costly luxuries, while so many are suffering privation, is somewhat heartless as well as dangerous.

Not a few of the Bishop's critics have been arguing that luxury is good for trade. Whether it is good for trade or not was not the Bishop's argument. He said that the flaunting of luxury in the face of real want is bad for human feeling, and undoubtedly he was right.

It is one of the most embittering things in the world for the needy, one of the meanest for the over-rich, and one of the most misleading for shallow minds, for it makes vulgar show one of life's chief aims.

When three such effects as these are produced on human nature it is time the bishops spoke out plainly, as the Bishop of Chester has spoken.



The Curse of the World

The Old Man Alone

THERE has lately been published in an old diary a pathetic picture of how an immortal man died all alone.

The writer of the diary was dining with Sir Thomas Lawrence, the famous artist, one night in the early summer of 1807, and this is what he wrote on going home:

Lawrence told me that Ralph Kirtley, Sir Joshua Reynolds's old servant, had informed him that from the time that Sir Joshua found he must die, he appeared to wish that no one should visit him: but he could not refuse to see Mr. Burke. He lay whole nights seemingly without sleep, but silent, except that after a long interval in the night he would hastily call out *Ralph*, as if to assure himself that he was not alone.

Will it not bring a tear to many eyes, as they look on the lovely pictures Sir Joshua Reynolds bequeathed to the world, to think of the old man alone, crying out in the darkness of the night?

Brightness All the Year

Sing a song of Seasons,
Something bright in all;
Flowers in the Summer,
Fires in the Fall. R. L. Stevenson

Bluebeard

THE boy emperor of China has celebrated his marriage by re-naming himself after Henry the Eighth. We hope he will not adopt his Majesty's methods of disposing of his wives.

Tip-Cat

THEY are selling the Kaiser's book at fourpence a copy in Berlin. We are sorry to hear of such extravagance.

MAN reaps what he sows, unless the birds get it.

SPORT, according to a footballer, is a bond between human beings. But he wouldn't like all matches to end in a tie.

THE lost chord of the nations seems to be accord.

NEVER put a young man to farming when it goes against the grain. So bad for the crops.

WHAT will the Post Office do to be saved? somebody has been asking. Give us back our penny post, we hope.

A PHYSICIAN declares that yawning is healthy. Fortunately it costs nothing and is open to everybody.

CHILDREN should not be allowed to develop low tastes. They may make mud-pies, but must not eat them.

SOONER or later, we are told, you get back what you give. But seldom what you lend.

A Word from a Grocer's Daughter
A VERY welcome letter comes to us from "a grocer's daughter," and we gladly find room for it here.

I am sorry that you say "only a village grocer" in your paragraph about our old friend Mr. Benjamin Harrison, about whom you have told us so much. It does not sound like you at all, and I am sure you do not mean to suggest that such a calling is less worthy than that of a famous geologist.

For there is no reason, is there, that as noble a personality may not grow up through serving one's neighbours in a village shop as in working among the stones and seeing visions on the Kentish Downs—even when those visions are going to reconstruct our ideas of the past?

We thank our grocer's daughter. We believe that grocers are as good as kings if both are honest. But is it not a great achievement that a man who had only the opportunities of a village grocer should have made himself more famous than some kings and put his name in scientific books all over the world? "Only a village grocer," we said, to add to his honour and fame, for it raised Benjamin Harrison up on high to remember that he began in a humble grocer's shop and made with his own hands the throne on which he reigns with those who served mankind.

Christian Europe

By Harold Begbie

THERE'S hate enough in this foolish world
To blow up a planet twice its size;

Talk of gases caged in the earth
And lightnings locked in the leaden skies,
They're nothing at all to the murderous hate
That boils in the heart of Christian man,
Whose Master died on the Cross of Shame
To show that Love was the better plan.

AFTER a war that had shamed the brutes
We talk of Peace in a foaming rage,
We threaten and shout; we arm to the teeth;
And we call it bringing a Golden Age!
We hate each other as never before,
We crown the eagle, we kill the dove;
And nearly two thousand years ago
Our Master died for the sake of Love.

O WHEN shall we learn that hearts of hate
Mean war and weeping, mean death and dearth?
And when shall we learn that love of God
Means brotherly love throughout the Earth?

The Window

By Our Country Girl

THE little mountain train was to take us up to a place from which we could see the peaks of Italy. We began to climb in a wonderful world of white hills, frozen waterfalls, and brilliant blue sky.

But the omnibus-like train-carriage was heated by radiators and packed with smokers. Soon the pane was blurred, and the air was not sweet.

We ventured to lower a window. A large Swiss crossed to us, growled "Excusez," and shut it with a slam.

At the next mountain station he got out, and we were invaded by a party of Italian tourists. They sat on one another's knees, and stood two deep down the gangway, singing and bellying jokes. They were in high spirits because their holiday was over and they were going back to Como. They say there is no homesickness like an Italian's.

"I shall suffocate," murmured my companion, and she lowered the window again.

A dozen heads turned toward the inrush of pure, icy air.

But before anyone could protest my companion had turned to the company with an appealing smile.

Je veux voir l'Italie, she said.
Instantly every brow cleared. They beamed. They nodded. They endured. And once again we breathed.

BOY PARLIAMENTS

CANADA'S GREAT IDEA MOVING AHEAD

Rulers of the Future Settle Down to Business

ELECTING PREMIERS AND CABINETS

A Canadian correspondent sends us a most interesting account of the meetings of the Boy Parliaments that have been held in the Legislative Chambers of Ontario and Manitoba, at Toronto and Winnipeg—that is, in the actual Parliament Houses of the two Provinces. A similar meeting has been held, we believe, in the Province of Alberta.

One of the most vital of recent movements in the Dominion has been this of training youth to take an intelligent part in local public life. A graded system of bringing boys together for religious, moral, and civic training has been gradually built up in the churches, the Boy Scouts, the Y.M.C.A., and similar movements more or less cooperating. Of the success it has attained there can be no doubt, and its culmination is seen in these Provincial Parliaments.

The boys are organised according to age and experience, and it is the elder boys, up to the age of 18 or thereabouts, who have been elected in their several districts to attend these Parliaments.

Reporting the Boy Parliament

One of the aims has been to organise youth in relation to work, and there is a Boys' Work Board for each province, to which the representatives attending the Christmas Parliament reported.

In Manitoba fine assistance has been given by that energetic daily newspaper the Winnipeg Free Press, which publishes every Saturday a supplement dealing with the movement throughout the province. During the meeting of the Boy Parliament the Free Press reported its proceedings in a daily issue with an abundance of photographs of the young legislators—a very bright and earnest-looking array—and the editor, Mr. J. W. Daffoe, one of the most notable of Canadian journalists, made an inspiring speech, at a luncheon, pointing out how deeply the world is indebted to the Parliamentary system which has spread from Great Britain, and how much depends upon training in youth for public life as practised in Britain.

Settling Down to Business

Both in Ontario and Manitoba the Boy Parliament was organised on the model of the Canadian and British Parliaments. The elected representatives from the constituency met and elected a Premier in each Parliament, and the second on the voting list became the Leader of the Opposition. A Speaker and a Secretary were similarly elected, and various Ministers were formed to deal with sections of the work, a Minister being appointed at the head of each Department.

From the actual National Parliament of each Province a Lieutenant-General represented the Crown, and read an address in which the programme of the session was summarised. Thanks for the address was moved and seconded in proper form, and then the Parliament settled down to its business.

Feeling their Feet

The public galleries of the two Legislative Chambers were crowded, many members of the real Legislative Assembly being present to watch the youngsters at work.

The boy Premier for Ontario was Milton A. Walker, of London, Ontario; Russell Bates, of Woodstock, was the Leader of the Opposition; and A. Smith, of Windsor, was the Speaker. The Premier for Manitoba was Edward Armstrong, of High Bluff; the Leader of the Opposition was Gordon Brownridge, of Brandon; and the Speaker was Russell Wiginton, of Elmwood.

The boys, who had been coached in Parliamentary forms, soon adopted the methods of address and speech that have been evolved through the long traditions

NEWS FROM EVERYWHERE

A salesman in Borough Market, London, has just received a refund of one penny from the income tax authorities.

An expedition of caterpillar-wheeled motor-cars has failed to cross the Pyrenees, owing to the way being blocked by an avalanche.

Lucky Find on an Allotment

An allotment-holder at Sheffield digging up his plot found an old silver coin which proves to be a crown of Charles the First, worth probably £250.

An Otter Chase in Norfolk

Hearing a great noise in a field at Wrentham, Norfolk, two policemen went to the spot and found an otter inside a fowlhouse. It had killed three birds, but escaped, although the policemen chased it across the fields.

Several swallows were seen at the end of January flying over London, though the usual month for their return is April.

A huge store in New York, whose proprietor has lately died worth £40,000,000, sold 290 grand pianos on one day not long ago.

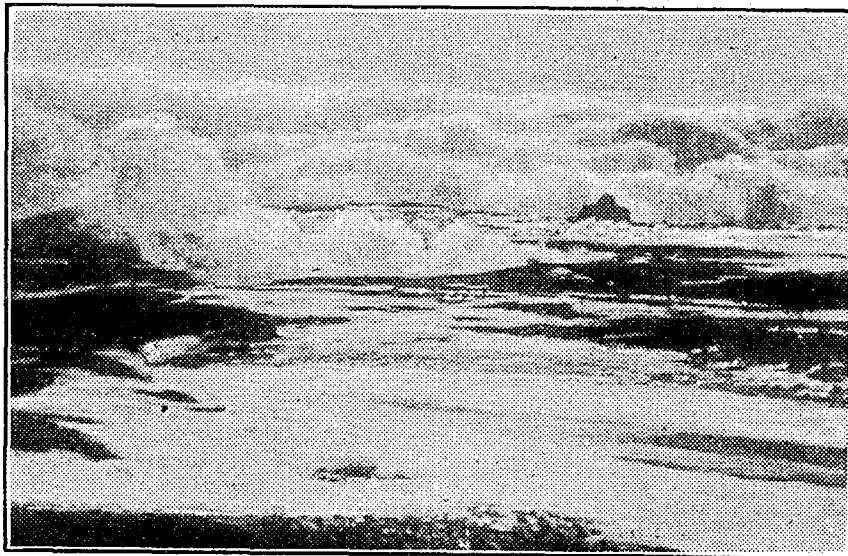
Essex Wireless Heard in Java

The signals transmitted from the wireless station at North Weald, near Ongar, in Essex, could be heard at Bandong, Java, 7500 miles away.

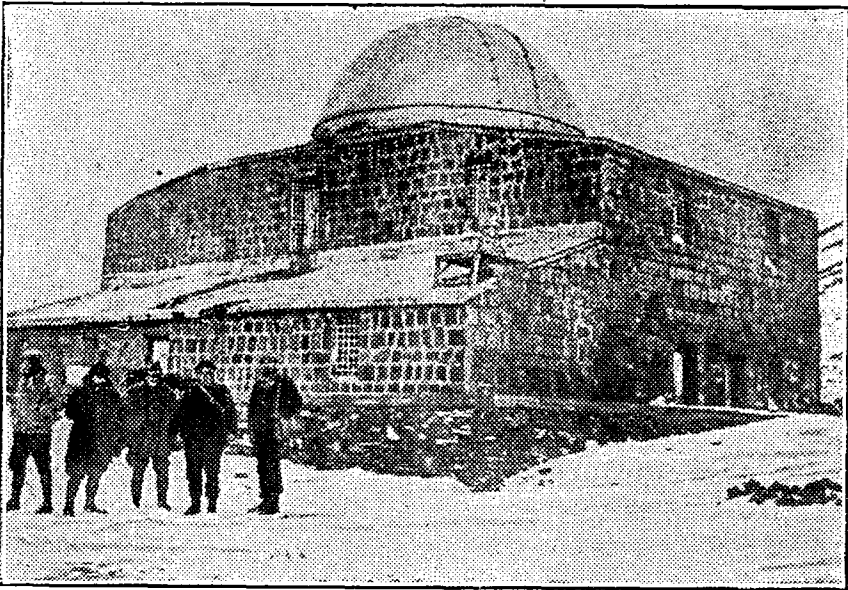
The Bible by Heart

A well-known blind Presbyterian minister, the Rev. George Evans, who has just died at the village of Pensarn, in Wales, aged 78, knew practically the whole Bible by heart. He never read the lessons in church, but recited them entirely from memory.

MOUNT ETNA'S WATCH TOWER



The crater in eruption, with the observatory in the distance



A near view of the Mount Etna Observatory

Mount Etna, which is over two miles high, has been in eruption for a long time, and the scientists in the observatory live in some peril. The observatory building, shown in these pictures, stands 9075 feet above the sea, and is the highest inhabited house in Europe, being nearly a thousand feet higher than the St. Bernard Hospice.

Continued from the previous column

of courteous parliamentary life, and saw the need of speaking for the most part in good English rather than in the slang of the day, though slang would creep into the speeches now and again.

The representatives were presently addressed as "honourable members," and not as "you fellows," and when the boys "felt their feet" a most promising level of argument and power of clear statement were attained. The universal feeling of the spectators was that the meeting had been a success both as a training in the methods of conducting public business and as a piece of sound administrative work in organising the activities of Canadian youth.

A very striking feature was the recognition of religious and moral principle as the foundation of all good citizenship. Every member took the oath of "Loyalty to the King of Kings."

The most striking utterance in connection with the Manitoba Boy Parliament was that of Mr. Daffoe, as he examined the foundations of Parliamentary Government, the Party System, and loyalty to truth as the rule that can never be set aside. He quoted John Bright's saying, that "what is true in morals is always true in statesmanship;" Burke's definition, "Party is a body of men united for promoting, by their joint endeavour, some principle in which they all agree;" and Lincoln's, "I am not bound to win, but I am bound to be right, and I must stand with anybody who stands for right, and part with him who goes wrong." Fine tonics all for young thinkers!

The complete impression received from this hopeful Canadian movement is that it is a vital new departure, conducted on sound principles and methods, winning strong public approval, and deserving of wide acceptance everywhere.

POST OFFICE ON THE ROOF OF THE WORLD

THE MAN WHO CARRIES THE MAILS

How Letters Travel Amid Wild Beasts and Avalanches

A MESSAGE THROUGH THE JUNGLE

Government reports do not, as a rule, make exciting reading, but the new report of the Indian Post and Telegraph Department is a thrilling document of Empire.

It tells of the correspondence of an immense land with a gigantic population, where the bulk of the villages have no railway communication with the rest of the world, no approach at all save a cattle track leading through the jungle.

Yet ill-clad natives carry the mails from end to end of India, and beyond, with a fidelity matching that of the British postman at home.

The Magic Mailbag

The bearers are mostly drawn from the lowest castes of natives. They are all very superstitious, and, though many face tigers, leopards, and snakes undaunted, they will go miles out of their way to avoid a tree they believe to be possessed by an evil spirit.

To such men the mailbag is a fetish, an instrument of magic, for whose safety no sacrifice is too great; and, though deadly animals, robbers, flooded rivers, and avalanches take a heavy human toll, the work goes on.

If the postmen regard the mail as a mystery, many of the native correspondents are equally ignorant of its methods. Some writers, to preserve the secrecy of their communications, do not put any address on the envelope; some put down an unknown personal name, and perhaps the native bazaar to which the person addressed goes to shop; nothing more.

Thousands of Native Runners

But others do this part of the business with excessive zeal, as this example testifies.

"To the one inseparable from my heart, the fortunate Babu Sibnath Ghose, having the same heart as mine. From post-office Hasnabad to the village of Ramnathpur, to reach the house of the fortunate Babu Prayanath Ghose, District 24 Perganas. Don't deliver this letter to any other person than the addressee, Mr. Postman. This is my request to you."

That is the sort of missive that issues from nearly 20,000 little Indian post offices, and that is carried by 26,000 native runners and village postmen at five shillings a week, and less. Every village is reached by the mail, even if only once a week. That is a noble tribute to British rule.

Highest Post Office in the World

The postal system now extends from India into Tibet, to whose capital, Lhasa, a telegraph line runs. It would be difficult to find a contrast more striking than this instrument of modern science in a land that has one of the most primitive of civilisations and teems with credulity and superstitions passing Western belief.

But there the mail and the telegrams go, and there at Phari Jong, 16,000 feet above sea level, is the highest post office in the world. We recently sent a scientific mission to the Andes to see how Peruvian miners manage to work at heights of 13,000 feet; we might have dropped a note of inquiry to the postmaster at Phari Jong.

FOR MOTORS ONLY

Fine New Road for Italy FROM THE CITY TO THE LAKES

On New Year's Day an Italian company began work on a road which will be the first in the world to be built for motor vehicles only.

The road will run between Milan and the Italian lakes, a route already popular with motorists, although the existing roads are narrow, badly made, and so congested with horse and motor traffic that motoring is slow and difficult.

The new road will be about 50 miles long, and will be straight except at two places, where wide curves will be necessary. It will pass clear of towns and villages, but will go close enough to towns to make a valuable convenience for their traffic.

The surface of the road will be of tarred cement, so that it will be dustless and impervious to rain; it will have a width of about eleven yards, and along both sides will be a track reserved for pedal cyclists.

The main road will be free to all motorists who pay a toll, which will vary for the class and weight of the vehicle, and will average about half-a-crown for each vehicle. The whole cost of the road is estimated at 60,000,000 lire, equal now to about £70,000. As it will be paid for by the tolls, and is being constructed without any charge to the nation, Italy will ultimately secure this fine new highway free of all public cost.

THE MOTH AND THE WOOL

Good News from the Chemists

It has been estimated that, despite all measures taken against them, moths do many thousand pounds' worth of damage yearly; but now the good news comes that chemists of a German dyeworks have discovered a substance which renders woolly materials moth-proof.

This is a coal-tar product called eulan, and, though it disgusts moths, it is both odourless and colourless.

Dr. Stehli, who has been experimenting with eulan, reports that wool treated with it is perfectly safe from attacks by moths. Even when moth caterpillars of all sizes are placed upon woollen materials they do no damage. As soon as they attempt to eat the wool they lose their appetites at once, and, after wriggling about for a time, become motionless, and die either of starvation or poisoning.

THE DESIGNSCOPE

Apparatus for Making Patterns

There are various adaptations of the kaleidoscope, but one of the most ingenious is that of a C.N. reader, Mr. Alexander Pringle, who has invented a designscope by which anyone can obtain an endless variety of geometrical designs and patterns.

Coloured wool, pieces of ribbon, flower petals, or indeed any small objects are thrown at random on a revolving table, and when the spectator looks down a triangular tube he sees a beautiful pattern. By revolving the table the pattern is constantly changed, and the number of combinations shown is practically endless.

As a toy the designscope is interesting, but as an aid to a designer it is invaluable. It is supplied by P. K. Arm, 1, Clarence Street West, Belfast.

In the Auction Rooms

The following prices have lately been paid in the auction rooms for objects of interest.

Naval chart of Captain Cook	£1080
Picture of Titian, by W. Dyce	£903
Italian carved dining-room suite	£575
Louis XV marqueterie table	£456
A George I plain silver caddy	£90
A George I silver cream jug	£66
Scotch plain silver tea-pot	£65
Mauritius 2d. stamp, 1859	£17

Emptying Pharaoh's Tomb

RARE TREASURES THAT HAVE BEEN FOUND

Tasting a Meal Cooked more than Three Thousand Years Ago

RESTORING THE GLORY OF A SPLENDID PAST

Little crowds of tourists have stood by enthralled watching the work of removing the wonderful contents of Tutankhamen's tomb.

For some days the work had been delayed, as it was necessary to find a safe and convenient storage place for these priceless objects. Mummified objects may easily be damaged by sudden changes of atmosphere, and in many cases it has been found necessary to treat them with chemicals before bringing them into the light and the open air. Even with the utmost care it was impossible to save the dresses and fabrics from crumbling at a touch.

Luckily Mr. Howard Carter found a very good place to put the treasures in—the tomb of another Pharaoh, Seti II. Before the work could go on, a stout steel door had to be placed at its entrance and fitted with a burglar-proof lock.

The Oldest Canned Beef

Among the things that have now been brought out are the trussed ducks and haunches of venison that were found carefully packed in wooden boxes in the tomb. One of the mummified ducks was quite a giant.

Still more interesting was a tray containing what is believed to be the oldest specimens of canned beef in the world. The meat, which is embalmed, was found packed in curious egg-shaped cases, and no fewer than 40 of these "eggs" were removed one afternoon.

When some of this beef was tasted, it was found that it was in a splendid state of preservation, though not very palatable.

At another time was brought out a tray which is supported by four torches representing the symbol of life. These torches are of marvellous workmanship, and are believed to be gold.

Wheels of Pharaoh's Chariots

Then came several horsehair whisks, each with a handle in the form of a leopard's head. It is not quite clear whether these were used as fly-whisks or for brushing away the dust.

Although it has not yet been found possible to remove Pharaoh's gilded chariots, some of the wheels have been brought out, and their construction caused the most intense interest to the spectators. The wood is cunningly fitted so as to give the greatest strength where most needed; and each wheel is both slight and graceful.

But the most fascinating find of all was made when experts were carefully removing the last fabrics from the box containing the king's robes. At the bottom they came across a little child's glove—the first Egyptian glove ever discovered, and the oldest by thousands of years. Probably it was worn by Tutankhamen when he was only three or four years old, and it still shows the form of his hand.

A Curious Couch

The task of removing all the objects has necessarily been a long one, but each, as it is brought to light, seems to show us something new of that entrancing Long Ago in which Tutankhamen lived.

A relic almost as interesting as the chariot has also been brought out. It is Pharaoh's imperial couch, and its sides are fashioned in the shape of the sacred cow, representing the goddess Hathor. The images are life-sized so far as the horns, tail, and length are concerned, but the width is curiously reduced to less than six inches. The head, too, is little more than half the natural size.

It is indeed wonderful to see what a little expert treatment can do to restore

these treasures to their old splendour. Where formerly Pharaoh's throne and sticks and boxes were drab and dingy, they are now gay and sparkling with their former splendour.

Here are some more of the wonderful things that have already been discovered.

Three state couches, all gilt, and exquisitely carved with heads.

Carved gilt beds, inlaid with ivory and precious stones.

A box containing various emblems of the underworld.

A Little Child's Stool

Pharaoh's royal robe, embroidered with a flower in gold and silver, and found in a box decorated with hunting scenes, together with precious stones and a pair of gold sandals.

A stool of ebony, inlaid with ivory, with most delicately carved duck's feet.

A little child's stool.

A gilt chair with portraits of Pharaoh and his queen, and encrusted with precious stones.

Four dismantled chariots decorated with gold and jewels. Each has the charioteer's apron of leopard's skin hanging over the seat.

The State throne of Tutankhamen, the first royal throne ever discovered in Egypt. It has a back panel, with portraits of the King and Queen, protected by the god Aton, carved in precious stones inlaid in wood.

Two silver boomerangs.

Little baskets very much like those used in Egypt today.

A Dummy for Pharaoh's Wigs

Pharaoh's shawls and underlinen, which were found in a box, together with a mace, arrows, sticks, and wooden cubit measures.

The king's toilet table, on which his perfumes stood.

An ebony armchair bound with papyrus.

Two sistra—quaint musical instruments used by the ancient Egyptians.

Two life-sized statues of the king, which were found facing one another, the eyes being of glass and the head-dresses studded with gems.

A foot-stool of the throne, with carved figures of Asiatic peoples—meaning that the king had placed his foot on the necks of Asiatic prisoners of war.

A robing dummy for Pharaoh's robes and wigs.

Exquisite alabaster vases, of an intricate and hitherto unknown design.

Wreaths still looking green.

Bunch of Flowers from the Past

An ebony bedstead inlaid with ivory and magnificently carved with pictures of the Egyptian household gods. The rails are covered with gold.

A sem, or priest's robe, which was found with some faience necklaces and a gold filigree buckle in a gilded casket.

Pharaoh's funeral bouquet, bound in a sheaf of palm leaves, was found close to one of his statues. The flowers, which have not yet been identified, are perfectly preserved, and the foliage still has some traces of its original green.

Tutankhamen's walking-sticks, with handles representing African and Asiatic prisoners, the faces, hands, and feet of the Negroes being of ebony, and those of the Asiatics of ivory, were also found.

As the day drew nearer for the opening of the inner tomb, the excitement grew intensely, and the suggestion that Tutankhamen may have been the Pharaoh of the Oppression, who would not let his people go, gave the event a solemn dignity.

THE BOOK FOR BUSY FINGERS

A NEW SORT OF ENCYCLOPEDIA

Things to Make and Know and
Do in a House

GROWN-UP'S COMPANION FOR THE C.E.

Editors have been thinking out new books and making them, and publishers have been printing and selling them for so many years that it might be thought there was hardly an idea left unused; yet we have only to mention the Children's Encyclopedia to show that an idea can sometimes be found which has never before occurred to any editor or publisher.

Another new publication of a totally different kind, but one to interest young people as well as grown-ups, has just been invented and produced by the same publishing house. If it cannot be said that it is so novel as the C.E., this new work, known as Harmsworth's Household Encyclopedia, is certainly unlike any other known to us.

Crafts and Hobbies for All

If we were to christen it for our readers as the Book of the Busy Fingers, we think that would be an expressive title, for it is a work intended to appeal almost entirely to those who are fond of doing things with their hands.

There is no home craft or hobby that is not there fully explained and illustrated. It is chiefly concerned with the pursuits and pastimes likely to be either educational or useful in increasing the comfort of the home.

Of course, the main appeal of this new book will be to the heads of the household, and its title describes it as "for handyman and housewife." At no time in the social history of our country has there been more need for such a work than now, when every department of labour has so increased in cost that people have to hesitate before sending for a local tradesman to carry out repairs.

Ten Thousand Subjects

The making and mending of everything that goes to the building up of a home are described in this new work, which covers the whole field of amateur mechanics and wood-working, deals in detail with the furnishing and decorating of a house, with the health and welfare of its inmates, with cookery, needlework, labour-saving appliances, indoor and garden pastimes, the care of the garden, household pets, domestic animals, and the law of the country as it applies to the householder.

There are thousands of books in existence, each covering some department of home life, but there never has been a work such as this, for the editor, Mr. J. A. Hammerton, has had the courage to face the problem of providing in one work all the information which previously could only be got in twenty.

The task of selecting about 10,000 subjects in which every member of the household is certain to be interested at some time or another, and arranging these so that at any moment the reader can turn to any one of them, might have daunted anyone but an editor who has already produced Harmsworth's Universal Encyclopedia.

The Lightning Calculator

Anyone who will invest in a copy of Part I of Harmsworth's Household Encyclopedia will have no doubt of the success with which this bold idea has been carried out.

This part contains some 250 articles, all lavishly illustrated. They range in their order from instructions on how to make an Abacus for teaching children numbers, to a long article with numerous working drawings on how to make half-a-dozen different kinds of Armchairs.

A further novelty of Part I is an entirely new LIGHTNING CALCULATOR, by which 60,000 intricate calculations can be made with surprising simplicity.

THE WEEK IN GEOGRAPHY

NAIROBI

THE MOST ROMANTIC CAPITAL IN AFRICA

Nairobi, the capital of Kenya Colony in East Africa, has come into prominence in the newspapers lately because it is the centre of a very difficult dispute between Europeans and a large number of Indians from British India who live there.

Nairobi has been known for less than a quarter of a century. In 1899 a railway was begun in what was then British East Africa to connect the seaport of Mombasa with the Victoria Nyanza and the country of Uganda; and Nairobi, 327 miles from the sea and 257 miles from the lake, was the most convenient centre from which to manage the railway.

Feeding Ground of Lions

It had the advantage of a very healthy climate where Europeans could live in a state of invigoration and physical enjoyment. Mombasa is a hot and unhealthy town on a flat and enervating coast, though of late years it has seen some improvements as regards health.

The railway passes gradually upward, through forests, and then reaches increasingly lofty feeding grounds for large numbers of wild animals and the enemies—such as lions—which prey on them at every opportunity.

At Nairobi a height of 5450 feet is reached by the railway track. All around is a plateau where the climate is refreshing. Farther inland the railway begins to descend rapidly toward the lake, which it reaches at the height of 3720 feet.

Naturally Nairobi, so finely situated, was preferred to Mombasa as the capital of the colony, though it was not the most populous or the oldest town. Now it is approaching Mombasa in population, the approximate figures being Mombasa 32,000, and Nairobi 24,000.

Men of Different Races

Many Indian coolies helped to make the railway, and some stayed in the country, which became a destination for Indian emigrants. Now in Nairobi there are about 2900 Europeans and about 8000 Indians, the rest being native Africans.

Round about Nairobi a number of British farmers have been attracted to the land by its climate, its fertile soil, and the presence near at hand of British neighbours. About 600 farmers are settled in the country round about.

The point in dispute between the different races is how far they shall participate in the government of the country and have equal treatment.

The 8000 Indians, who belong by birth to the British Empire, and some of whom have served it faithfully as soldiers, contend that they ought to be recognised as citizens in a measure that will not apply to the 50,000 native Africans round about and the twelve or fourteen thousand in the town.

Stampede in the Streets

With equal rights the Indians would rule; as they have more than a two to one majority. But the real progressive working of the country is in British hands. The question of racial rights is one that arm-chair politicians six thousand miles away are not competent to settle.

In one respect Nairobi is the most romantic capital in the world. It stands in the midst of a country that abounds with wild animals; and such a thing as a stampede of a herd of zebras through the streets is by no means unknown. Now and then a lion will pick up a would-be citizen and make off with him.

TWENTY MILLION PEOPLE GONE

The Curse of a Nation

WHAT WAR, FAMINE, AND DISEASE HAVE COST RUSSIA

If there had been no war, Russia would probably have about twenty million more people today. So estimates the Health Section of the League of Nations.

The total population of Russia is at least nine millions less than in 1914, whereas, at the normal rate of increase, it should have been twelve millions more.

The loss of the nine millions is accounted for as follows: Emigration, 2,000,000; losses in the war, 2,500,000; losses in civil war, 1,000,000; excess mortality, due to epidemics, 3,500,000.

To these losses, moreover, have to be added the deaths caused by the recent famine which was, to a certain extent at least, due to the war.

Surely such terrible facts must have taught even the present rulers of Russia the folly and stupidity of war.

A FORTUNE FROM FOXES

Prosperous New Industry in Canada

Prince Edward Island, the smallest of the Canadian provinces, has established a new industry which is bringing her great wealth.

This is fox farming, an industry the object of which is to provide fine furs for use in cold climates. Three thousand pairs of foxes were established in a reserve on the island, and they have multiplied greatly, so that last year the revenue from skins was £250,000, or nearly as much as the revenue from fish and dairy products combined.

These have hitherto been regarded as the island's main sources of wealth, but fox farming has now taken first place.

Prince Edward Island is 130 miles long and from 4 to 34 broad, and has a population of about ninety thousand. Its coasts are so indented that no place is more than eight miles from the sea.

The climate is extraordinarily healthy, and people often live to over a hundred without illness. See World Map

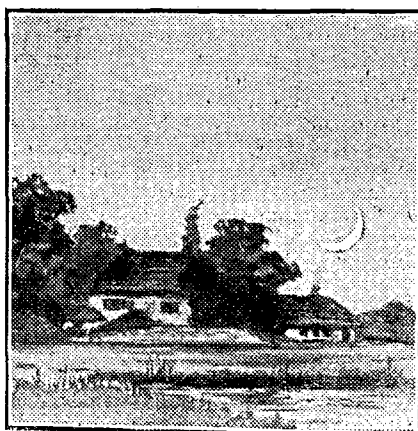
LIGHT BY NIGHT

Always a Little

What is the colour of the sky at night? Lord Rayleigh has taken some interesting photographs of the sky when both the Sun and Moon were below the horizon—when, in the ordinary way, we should say it was as "black as night."

But the spectroscope and the camera tell us that even in what we call pitch darkness there is still some light. Some of it comes from distant stars, but some comes, it appears, from the auroral discharges of atmospheric electricity at the North Pole, and some is doubtless reflected by the sky itself from the Sun, even when the Sun is invisible to us.

THE MOON NEXT WEEK



The moon at 6 p.m. on February 17

C.N. QUESTION BOX

All questions must be asked on postcards, and not more than one question on each card. Name and address must always be given.

With What Gases are Electric Light Bulbs Filled?

Most of them have nitrogen inside, though some, for special purposes, are filled with neon.

On What Should a Water Tortoise be Fed?

Give it small pieces of meat cooked or raw, also fish. If the food is dropped into the water the tortoise will dive for it.

What is Imprisonment in the Second Division?

The prisoner is separated from prisoners of the ordinary criminal class, wears a different dress, and is allowed more frequent letters and visitors.

What is the Chemical Matter Used in an Arc Lamp for Illumination?

Two rods of carbon pointing at one another but not touching. An electric current passed through these jumps the gap between and makes an arc of light, hence the name arc lamp.

Which is the Largest Cathedral in the World?

St. Peter's at Rome, covering an area of 18,000 square yards. It is 205 yards long, and the dome is 138 feet in diameter. St. Paul's, in London, is only half the length, and could be put inside St. Peter's.

How Many Countries Use the Metric System?

Most civilised countries do so, the chief exceptions being the United Kingdom and British Empire, the United States, and Russia. The metric system was invented in France at the end of the eighteenth century.

Does the Pupil of the Eye Always Remain the Same Size?

No; it contracts or dilates according to the amount of light falling upon it. When the light is strong the pupil contracts so as to let less light in upon the retina, and when the illumination is weak the pupil opens to let in more light.

To Whom Does the Treasure Found in Tutankhamen's Tomb Belong?

To the Egyptian Government, who will no doubt retain the bulk of it; but probably the authorities will allow Lord Carnarvon to retain certain articles as a matter of courtesy in return for what he has done in discovering them.

What is Ebony?

Ebony is the name given to various woods, noted for their dark colour and hardness. The name means a stone, a reference to the hardness. The best kind of ebony is the heart-wood of a tree that grows in India and Ceylon, and is known to botanical science as *Diospyros ebenum*.

What is Basalt?

This is a general name given to a number of dark, volcanic rocks that vary considerably. They all consist, however, of a mass of minute crystals. Basalt is often found in the form of columns, as at the Giant's Causeway, in Ireland, and at Fingal's Cave, in the Island of Staffa, Scotland.

How is the Heat of a Heavenly Body Measured?

By means of a very delicate instrument called a thermo-couple. Two bars of different metal are welded at one extremity, and the other ends are joined by a wire. The heating of the joint sends an electric current through the wire, and so sensitive can these instruments be made that the heat of a star hundreds of millions of miles away can be measured by them.

Why is Next Easter on the Same Day as the Full Moon Following March 21?

The rule is that Easter shall be the first Sunday following the full moon that comes on or after March 21. The moon referred to, however, is not the real moon but the Paschal, or Ecclesiastical, moon, an imaginary moon whose motions are governed by a table of figures called Golden Numbers. The Paschal moon this year falls before the full moon of April 1. The fixing of Easter is too complicated a matter to explain in detail in this column.

THE TWINS IN THE SKY

PAIR OF SPLENDID STARS NOW VISIBLE

Giant Suns Enveloped in a Fiery Atmosphere

A FAR-OFF SOLAR SYSTEM

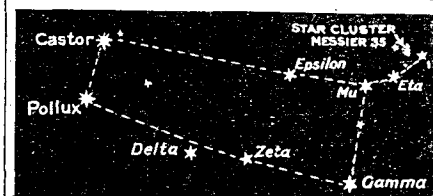
By Our Astronomical Correspondent

A pair of splendid stars adorning the night sky may now be seen, and identified as The Twins—Castor and Pollux.

They are due south about 10 p.m., and very high up, not far from overhead, and some eight or nine times the Moon's apparent width apart. Earlier in the evening they will be found a little toward the south-east.

These two stars, with the aid of our star map, will help us to find other wonders in this part of the heavens.

Castor itself is a wonder, composed of two magnificent suns, each much larger, brighter, and hotter than ours. They



The Chief Stars of Gemini, and the Great Star Cluster

are intensely brilliant incandescent furnaces, capable of engulfing from fifteen to twenty million Earths at least.

These suns are enveloped by an immense atmosphere of hydrogen, lime, and various metals, all in a state of fiery vapour; and around each revolves an immense fiery world, one in about 9 days, and the other in about 3 days, travelling, therefore, at terrific speed. They are so close to the great suns as to be almost joined to them.

In addition, there is a fifth enormous body, some distance away, which is apparently associated with the others, but it gives much less light.

Stars Seen with a Field-Glass

This marvellous far-off solar system is approaching us at 1300 miles a minute, and its light takes between 36 and 41 years to reach us.

Pollux is at a distance of just over 50 light years, or 3,300,000 times as far as our Sun; and he is getting farther off still, at the rate of but 55 miles a minute. Pollux is a sun similar to ours, but estimated to be nearly eighty times as large.

The other chief stars of Gemini may be easily identified. Gamma, in the midst of numerous small stars that can be seen even in a field-glass to appear to crowd round it, is a magnificent sun, similar to those of Castor, and also very much larger than ours, radiating thirty times as much light. This sun is approaching us at 606 miles a minute, and is calculated to be 45 light years away, a distance at which our sun would be scarcely perceptible to the naked eye.

Yellow Suns with Blue Companions

Mu is actually composed of two suns, one very faint and bluish in colour, which may revolve around the much larger yellow one. Large yellow suns are often found to have small blue or greenish companions. Its light takes 125 years to reach us.

Eta, a star of similar brightness to the right of Mu, is also revealed in a telescope as two suns. These are much farther off, the light from the brighter one taking about 200 years to reach us. The light from the other, a very small one, will take, of course, the same time, supposing it to be part of the same solar system.

It may, however, be much farther off, and may only appear to us in the same line of sight. This appears most probable, for the larger star is one of those colossal pulsating globes, of gas chiefly, whose light fluctuates with recurring internal convulsions. In this instance it occurs every 229 days, when the sun's brilliance is more than doubled. G. F. M.

THREE BOYS AND A BOAT

An Exciting Adventure
in the Lonely Highlands

What Has Happened Before

Ian Wilton, Rupert Benfield, and Tony Dale, the Three Inseparables, are to spend the Christmas holidays at Ian's home. Tony is a red-headed boy known as Freckles; and Rupert, who has many grown-up ways, aspires to be a new Sherlock Holmes.

In the train the three friends meet a Professor Cornelius Debenham, who shows much concern for his attaché case, and anxiously asks the boys if they have heard of a man named Bolvido.

They arrive at Waterloo Station in a fog, and Ian sees two men watching the Professor. One of them snatches the attaché case, and when Ian attempts to recover it he is struck senseless.

CHAPTER 4

Rupert Gets Busy

WHEN Rupert, in accordance with Ian's instructions, set off in search of a taxi to take the three chums to Sir Henry Wilton's house, his mind was even busier than usual. But the thought of the immediate task in hand found very little room in his brain.

Only the day before a convict had escaped from a quarry working-party at Dartmoor and had not yet been caught. The news, though trivial in itself, kindled the liveliest excitement in the breast of the dauntless Rupert.

The fellows at school thought it funny to laugh at him because he was keen on detective work, did they? If only he could get half a chance to show them what he could do they might treat him very differently. There was no reason why a smart fellow like himself should not run the criminal to earth.

Filled with these encouraging thoughts Rupert passed through the platform barrier and began to make his way through the crowd.

Suddenly a voice exclaimed sharply: "I say, young man, is it really necessary for you to walk all over my corns?"

With a start Rupert came out of his brown study, to find a well-groomed, dapper little gentleman ruefully nursing a patent-leather shoe, and gazing at him with an expression in which amusement and pain struggled for mastery.

"I—I'm most tremendously sorry, sir," Rupert stammered hastily, raising his school cap. Then his heart almost stopped beating with excitement. Pulling a newspaper cutting out of his pocket he scanned it eagerly.

"Golly!" he said to himself. "I believe that's the very fellow."

The man on whose toes he had so carelessly trodden certainly bore some resemblance to the description of the "wanted" convict. True, the convict was clean-shaven according to the police description, whereas the other had a neat military moustache; but Rupert felt sure that this was merely a clever disguise.

By this time all thoughts of the taxi had faded from his mind. All he could think of was this glorious chance of distinguishing himself that had so opportunely presented itself.

Rupert's first thought was to summon the police to his aid, but this he speedily dismissed.

"I don't see why I should give any lazy bobby the chance to earn the credit," he thought as he watched his unsuspecting victim. "No, I'll jolly well tackle the job myself."

Suited the action to the thought, he approached the stranger, who was standing gazing up the platform, and, tingling with suppressed excitement, tapped him on the arm.

The other swung round in surprise, and then, catching sight of Rupert, smiled broadly.

"Hullo, you again? If you've come back for another stroll over

: : Told by
Vernon Bruce

my corns, young man, I'll tell you at once you are doomed to disappointment."

"This is no time for jesting," remarked Rupert severely.

"I beg your pardon," the stranger said solemnly, adding, "If there's anything I can do—"

Rupert held up his hand. It was high time to stop this fellow's light jesting.

"How is Dartmoor?" he inquired, gazing sternly at him.

The stranger looked puzzled.

"I may be very dense in my old age," he said, "but I'm afraid I don't follow you. Is this a riddle?"

"Aren't you the escaped convict?" stammered Rupert, who was completely upset by the other's coolness.

The stranger burst into a roar of laughter.

"You really are a queer chap. Not content with nearly crippling me for life you come up and propose to arrest me."

Poor Rupert, scarlet with shame and mortification, endeavoured to apologise, but the pleasant-looking stranger cut him short.

"Never mind. I'm sorry I can't oblige you by producing any broad arrows; but I admire your keenness, my boy. Only remember in future that it pays to make sure of your facts first and act afterwards. And now," he added, cheerfully, "as I see you are wearing the cap of my son's school perhaps you can help me to find him."

"Rather, sir," said Rupert, only too grateful to make amends. "What is his name?"

"Wilton—Ian Wilton," answered the gentleman.

"Why, you must be Sir Henry Wilton!" gasped Rupert as the full enormity of his blunder was borne home to him.

"You are right this time, anyhow," laughed Sir Henry.

"How awful, sir. My name's Benfield. I'm coming to spend the vac. at your house and I've tried to arrest you," cried poor Rupert.

"Well, you didn't succeed," replied Sir Henry, with a chuckle. "Great Scott! What's that?"

"Through the fog there came a hoarse shout, followed by the sound of running feet, and the next moment Sir Henry was hurrying in the direction of the noise, with Rupert close on his heels.

CHAPTER 5

Sir Henry Meets an Old Friend

MEANWHILE Ian was rapidly regaining consciousness. A confused murmur, which gradually swelled in volume, came to his ears, and he slowly opened his eyes, only to close them again as a searing pain shot through his temples.

Gradually the murmur dissolved itself into the sound of voices talking round him, and he opened his eyes and struggled into a sitting position.

"Where's the case?" he muttered, staring stupidly at the little crowd that stood round him, while a man with "doctor" stamped all over him continued to bathe a cut above his left eye, dipping a towel into a basin of water held by a railway policeman.

"Don't you worry about that," said the doctor. "Your tall friend there has got it safely." And he pointed to where the Professor was standing with Freckles, the picture of concern, a few feet away.

"Yes; you saved it right enough, sir," chimed in the policeman. "The beggar who tried to steal it got away clean and proper, though," he added regretfully.

Sir Henry, who had been attracted by the noise, forced his way through the crowd, and, on seeing who was the centre of interest, uttered an exclamation of surprise.

Ian caught sight of his father and grinned feebly.

"Hullo, Dad! Here we are! No bones broken."

Sir Henry glanced at the doctor, who nodded reassuringly.

"The boy's not seriously hurt. A nasty stunning, but no damage done. Do you feel you could get up now, old man?" he added, to Ian.

"Oh, yes!" answered Ian. "I feel a bit shaky; but apart from my head, which is aching like fun, I'm all right."

"Then I suggest that we get you into a waiting-room and then the explanations can follow."

The crowd, seeing that nothing more was going to happen and requested politely to "Move on there, please," dispersed, and the little party was soon settled in the privacy of a waiting-room.

There the doctor took his leave of them, warmly thanked by Ian and his father, and then Ian told briefly what had happened.

Sir Henry, who was blessed with the steady nerves and cool brain of one who has served his country in many quarters of the globe, sighed as his son concluded his narrative, and remarked pathetically:

"I seem to be enjoying a pretty crowded morning, I must say. First I'm trampled on, then I'm mistaken for a— Here he caught Rupert's agonised glance, and added, "But that little episode is a private affair."

From that moment Sir Henry gained a devoted admirer, ready to place body and soul at the disposal of a sportsman who, as Rupert, gleefully told himself, "played the game like a gentleman."

"To crown all," continued Sir Henry, "I find my son reclining gracefully at full length on Waterloo platform, as a result of chasing some wretched bag-snatcher half round the metropolis."

The poor Professor, who had been standing in the background, looking decidedly uncomfortable, now stepped forward.

"I'm afraid it is my fault, sir. I must apologise for all the trouble that I have occasioned."

Sir Henry, who had been too busy looking after his son to pay much attention to anyone else, now turned and regarded the Professor for the first time.

"Why, bless my soul," he exclaimed, "it's Debenham! Don't tell me you've forgotten me."

"I'm very much afraid I do not recall you for the moment," murmured the Professor, blinking through his glasses.

"You can't have forgotten Harry Wilton, who had rooms over yours at Christ Church!" exclaimed Sir Henry in mock alarm.

"Great Aristotle!" cried the Professor, rushing forward and grasping the other by the hand. "It's Harry Wilton! Fancy meeting you again after all these years!"

And the two old friends wrung each other's hand warmly.

The Book for YOU

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CHILDREN'S
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Edited by
ARTHUR MEE

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CHAPTER 6

The Professor's Invitation

WHEN Sir Henry and his old friend the Professor had chatted for some time in the way that people will when they meet again after a long period of years, Sir Henry suddenly turned to the three chums, who were regarding the proceedings in high amusement.

"By Jove!" he cried, in consternation, "I've got some bad news for you youngsters. All this excitement drove it right out of my head."

"Nothing wrong with the Mater, is there?" inquired Ian anxiously.

"No, no, my boy; your mother is quite fit," his father replied.

"Then what's wrong?" demanded Ian.

"Unfortunately one of the maids is down with measles—she only contracted them last night."

"Too bad of her. She ought to know better," suddenly exclaimed the Professor, thinking that it behoved him to say something.

"Well, we can hardly blame the poor girl," said Sir Henry, with a laugh. "But the trouble is that we can't run the risk of infecting these young rascals by letting them stay in the same house."

The boys were loud in their protestations, all of them declaring that they were quite prepared to chance it.

But Sir Henry was quite firm on the point. How could he face their parents, he asked, if they got ill through any fault of his?

"But what is going to happen to us, Father?" demanded Ian anxiously.

"You will have to spend the night at an hotel," his father answered, "and then I'm afraid your friends must return home."

The wail of dismay that the three friends raised on hearing this dreadful announcement was so heartrending that the Professor started, and, turning to Sir Henry, said:

"I owe a deep debt of gratitude to these young gentlemen, and now, as I understand that your arrangements for the holidays have been upset, may I take the opportunity of repaying one good turn with another? If you would care to accept the hospitality of my house for the duration of your holidays, I shall be delighted to have you as my guests."

The idea of staying with anyone as delightfully absent-minded as the Professor appealed greatly to the boys, who saw the prospect of some mild fun at the expense of their new friend. If they could have foreseen the strange and stirring events which the future held it is doubtful if they would have shown such light-hearted eagerness as they displayed in the cold station waiting-room on that eventful morning in December.

"That's very good of you, Debenham," said Sir Henry gratefully. "I'll write and ask the permission of their parents, and then I'm sure these youngsters will love to visit you. By the way," he added, "where are you living now?"

The question seemed to worry the Professor, for, after a few moments of deep thought, he could only murmur that it was "somewhere in the Western Highlands."

"The same forgetful old Debenham," laughed Sir Henry. "I'm afraid you will have to be a little more explicit if you want your guests to find you."

"Ah, here we are!" exclaimed the Professor, who had been busily searching through his notebook. "This is my address." And he handed Sir Henry a card bearing his name and "Doornshiels, Loch Letterfern, Ross-shire," engraved upon it.

"Whatever makes you bury yourself away in the wilds of Scotland?" asked Sir Henry.

"Well," said the Professor, instinctively lowering his voice, "I am engaged on some experiments of the greatest secrecy. That is why I'm so grateful to your son for recovering my despatch-case," he added cryptically.

TO BE CONTINUED

Who Was He?

The Traitor

ABOUT 450 years before the Christian era a boy was born in Athens whose name was to become both famous and notorious in his country's annals.

He was rich and clever, but loved to have his own way. Once when he was playing a game with other boys in the streets of Athens a cart came along and he called to the driver to stop. The man laughed and drove forward, whereupon the boy lay across the road and compelled the man to pull up.

On another occasion he was wrestling with a companion when, finding himself getting the worst of it, he bit the other's hand to make him let go.

"You bite like a woman," said his companion.

"No," replied the boy. "I bite like a lion."

He grew to be the richest man of his day, dressing splendidly and doing all kinds of foolish things to make people talk about him, for he was very vain. But he had great ability, and became the pupil of one of the wisest men the world has ever known. But the sage's lessons never sank into his mind, and he went on acting stupidly.

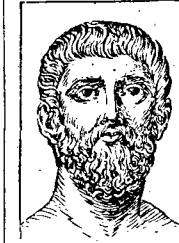
One day, for example, he went up to a quiet, respectable citizen and, for no reason at all, boxed his ears. Then the next day he went to the victim's house and apologised and offered to take any punishment the man cared to give him.

Athens was then at war with Sparta, and the rich young man went off to fight, and won a number of battles. The Athenians were delighted and made him one of the leaders of an expedition to another land. But no sooner had he sailed than he was recalled to answer the charge of having broken the images of the gods in Athens during a foolish escapade. Instead of going home to answer the charge he fled to Sparta and, turning traitor, fought against his native land.

At Sparta, as at Athens, he sought to please the people and be talked about, but instead of dressing splendidly he now followed the custom of the Spartans, wearing coarse garments, eating plain food, and having his fine curls clipped.

The King of Sparta, however, did not trust him, and, knowing this, the young man turned traitor again and fled to the Persians, another enemy of his people, but he could never be true to anyone for long, and he soon returned to Athens and helped to win a victory over the Spartans.

Sparta, however, won in the end, and when the traitor fled again to Persia the Persians killed him. It is a sad story and a tragic end for a man who had splendid abilities but misused them. Here is his portrait. Who was he?





A Merry Heart is a Purse Well Lined

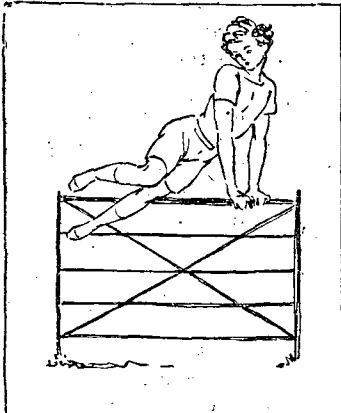


DI MERRYMAN

THERE was no cat in little Elsie's home, so in a friend's house one day she watched with interest while a big cat curled itself up comfortably on the rug before the fire. Presently it began to purr.

"Mother," exclaimed Elsie in alarm, "the cat's begun to boil!"

Highroads to Health



Vaulting

WHAT lock can no burglar pick?
A lock from a bald head.

Is Your Name Hyde?

HYDE has nothing to do with hide, a skin, as is often stated, but is derived from a certain measure of land; and no doubt the one who first bore the name owned or cultivated a piece of land of this size.

What Am I?

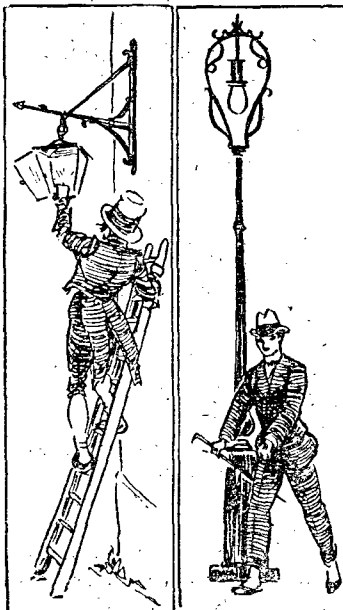
ERE Adam was, my early days began;
I ape each creature, and resemble man;
I gently walk o'er tops of tender grass,
Nor leave the least impression where I pass.
Touch me you may, but I can ne'er be felt,
Nor ever yet was tasted, heard, or smelt;
Yet seen by day; if not, be sure at night
You'll quickly find me out by candle-light.

Answer next week

The Limit

THE most dreadful example of absent-mindedness, on record is that of the man who was on his way to the station when it occurred to him that he had left his watch at home. He took it out of his pocket to see if he had time to go back and get it.

Then and Now



1823—Oil Lamp

1923—Arc Light

The Seasonings

"NAME the seasons, Jackie," said the teacher, pointing to a small boy who was not particularly attentive.

"Salt, vinegar, pepper, mustard," was Jackie's immediate reply.

Why are Addison's works like a looking-glass?

Because in them we see the Spectator.

Do You Know

THAT Iceland is not the land of ice that its name suggests? The island is never surrounded by ice. There are some glaciers, but the climate of Iceland is not very severe in winter and is warm in summer.

That the beefeaters at the Tower of London are really buffeters—men who waited at the royal table and buffet?

That the catgut used for violin strings is not made from the internal organs of the cat, but from those of the sheep?

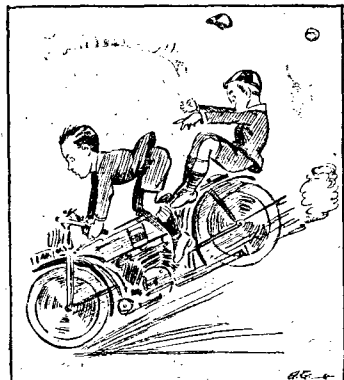
That a newly-married man is often spoken of as a Benedict? It should be Benedick, and is a reference to this character in Shakespeare's "Much Ado About Nothing." He ridiculed love, but afterwards married Beatrice.

A Money Problem

A MAN had thirty-five shillings made up of five half-crowns, four florins, and twenty-nine pence, and he decided to divide the sum equally between his two sons. He found that he could give each of them the same amount and the same number of coins.

What coins did the boys receive?

Solution next week



Adventures of Augustus & Marmaduke

AUGUSTUS said to Marmaduke, "I think we'll try to ride Mr. Johnson's motor-bike—it's standing just outside. I'll sit on the saddle, you sit on the seat behind."

To start the bike, young Gussy said, "a way I soon will find." Both boys climbed into the seats, but now young Gussy found it wasn't quite as easy as it seemed when on the ground.

Augustus pulled a lever, and Marmy did the same;

The cycle jumped a yard or so, then crashing down it came.

From the saddle Marmy shot, Augustus with him went,

"O dear! O dear!" said Marmaduke, "this isn't what I meant!"

ANSWERS TO LAST WEEK'S PUZZLES

What Am I? View, vie, vi, viii

A Horse Problem

An exact division could not be made, of course, so the judge borrowed a horse, making twenty. Then, awarding Harry ten, George five, and Frank four, he returned the borrowed horse to its owner.

What Is His Name?

Gladstone, golf, lily, ape, dagger, sack, Toulon, onyx, Nora, elm

Jacko Makes It Up

WHEN Jacko dashed into the roast-chestnut barrow and sent the whole lot flying, it made the man so mad that he followed the young rascal home.

He didn't find Jacko, but he found Belinda; and it took all Belinda's housekeeping money to pacify him.

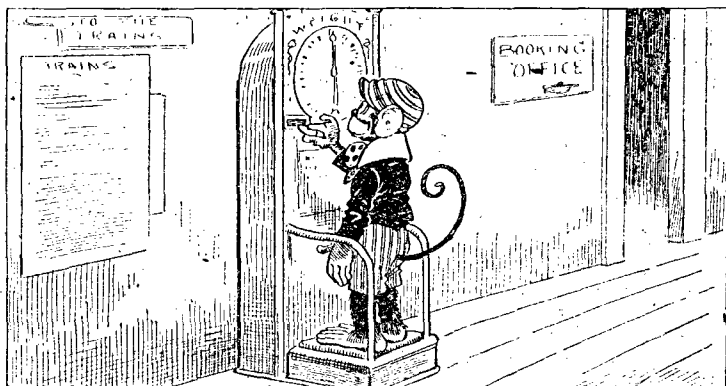
That night Jacko was afraid to go in, so he curled up in the tool-shed for the night. The next morning he got up early and crept down to the village, miserable and breakfastless.

"My word," he said to himself as he went along, "I have got an empty feeling!"

On the way he passed the railway station and went in.

"Oh, joy!" he cried, as he saw a chocolate machine.

He ran up to it, and tugged at it again and again, but nothing



"Wonder what I weigh," muttered Jacko

happened. So, very sadly, he chose his thinnest penny, pushed it in, and pulled the slide out.

"This won't feed the family," he grumbled, as he wandered off munching the tiny slab of chocolate.

"Great snakes!" he cried suddenly, staring before him, "it's Big Ben's baby brother!"

It was a weighing machine, tall, like a grandfather clock.

"Wonder what I weigh," muttered Jacko, springing on.

The hand buzzed round to 4 stone 13 pounds 12 ounces. Just then he caught sight of the familiar figure of Grandpa coming along the platform.

"Hullo, Grandson!" said the old gentleman. "What are you doing here?"

"I came to get some chocolate and try my weight," replied Jacko.

"Why, I've just bought some chocolate to eat in the train," said Grandpa. And he gave Jacko a thick packet. "You little shrimp," he added, "I'll give you 1s if you weigh 5 stone."

Jacko jumped on to the machine, Grandpa put in a penny, and the pointer shot round to 5 stone 4 ounces!

"Hot toasted muffins!" cried the old gentleman. "You are a sturdy little fellow. I'd never have believed it." And, digging into his pocket, he pulled out his note-case and handed 1s to Jacko.

Jacko put out his hand, but he didn't take the money.

"There's something wrong, Grandpa," he said. "When I weighed myself I was not quite 5 stone."

"Well, try again," said Grandpa.

And Jacko did, but the scale again showed 5 stone 4 ounces. Jacko and Grandpa puzzled over the mystery till the train came in; and then Grandpa pressed the note into Jacko's hand, and jumped into his carriage.

"You can keep the money for being so honest," he said. Then suddenly he popped his head out of the window, chuckling.

"Ha, ha, ha!" he cried, "I've solved the mystery. No wonder you weighed so much; that packet of chocolate weighed half a pound."

"One of the best, Grandpa," murmured Jacko. "Now I can make it up to Belinda."

The paragraph on the right is a French translation of the paragraph on the left

A Horse's Memory

A Scottish reader gives an illustration of a horse's memory.

On Thursday last week I was eating an apple on my way to school when I saw a big cart-horse. As it stood by the pavement I gave it a slice of my apple.

On Thursday this week I met the same horse. This time it was walking, but it stopped beside me, and would not go on till I had given it another slice of apple.

La Mémoire d'un Cheval

Un lecteur écossais donne un exemple de la mémoire d'un cheval.

Jeudi de la semaine dernière je mangeais une pomme, en route pour l'école, quand je vis un grand cheval de charrette. Comme il se tenait près du trottoir je lui donnai une tranche de ma pomme.

Jeudi de cette semaine je rencontrais le même cheval. Cette fois-ci il allait au pas, mais il s'arrêta près de moi et refusa de se remettre en route avant que je lui eusse donné une autre tranche de pomme.

Tales Before Bedtime

Pancakes

IT was all Christopher's fault really, because he was twelve and ought to have known better, and Betty, John, Molly, and Babs were all little.

Christopher went to a day school, and on the half-holiday before Pancake Day he said, "Look here, you children, how much money have you got?"

They turned out their money-boxes and found that they had three shillings between them.

"Good luck!" said Chris. "Now, you all know that cook is mean. She will never make enough pancakes. So what do you say to buying eggs, flour, and milk and things, and cooking a few pancakes for ourselves in the nursery while Susan's out?"

They all thought it a lovely idea, and Chris went out in the rain and spent the three shillings on flour, eggs, milk, and lard. Then he borrowed cook's frying-pan and cookery book, and the fun began.

They mixed the things in a basin out of the bathroom, and beat them up with a wooden skittle until they bubbled.

Then John made up the fire, Chris tied on an apron, Betty and Molly laid the table with spoons and the nursery sugar-basin, and Babs held the plates to warm.

Chris didn't make any mistakes. He was quite a clever cook, and though the first pancake broke when he tried to toss it, and fell on the floor, it really tasted delicious.

After the third he began to toss splendidly, and it was exciting to see him send the brown cakes flying up in the air and to watch them fall snugly into the pan again.

Then Chris became too clever. He began to show off, and



They mixed the things in a basin

tossed the pancakes higher and higher till there was only enough batter left to make one more.

"Now watch!" he cried. "Going! Going! Gone!" And up flew the pancake.

But alas, it never came down, because Chris tossed it so high that it stuck on the newly white-washed ceiling in a sticky mess.

When Susan came in she was terribly angry, and she marched Master Christopher off to Daddy's room, and there he had such a scolding that he will never want to toss pancakes to the nursery ceiling again!

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CHILDRENS NEWSPAPER

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BOY'S PARLIAMENT HOUSE · RESTORING THE ABBEY · ELEPHANT ON A RAFT



Home of Canada's Boy Parliament — The City Hall, Toronto, where the Boy Parliament, already described in the C.N., is held. This splendid movement is growing rapidly. See page 7



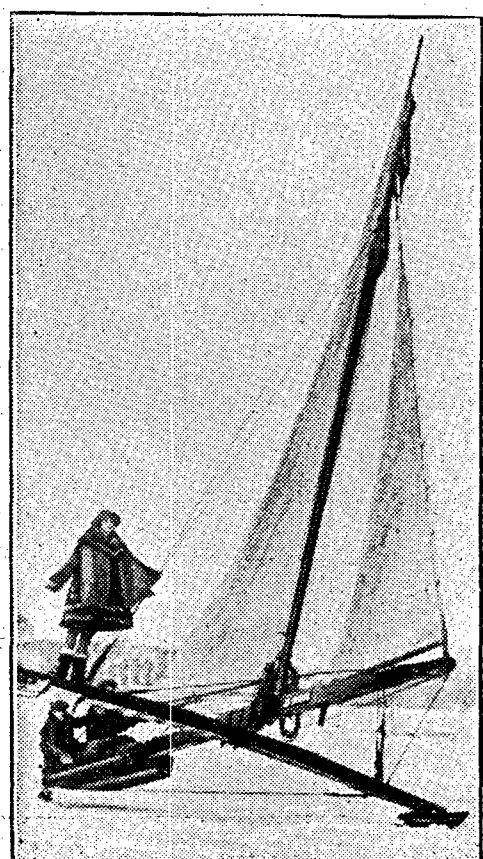
A Big Jump — Mr. Nicholson, a well-known skating expert, who has been staying at St. Moritz, in Switzerland, making a big jump on skates. He is able to clear seven people easily



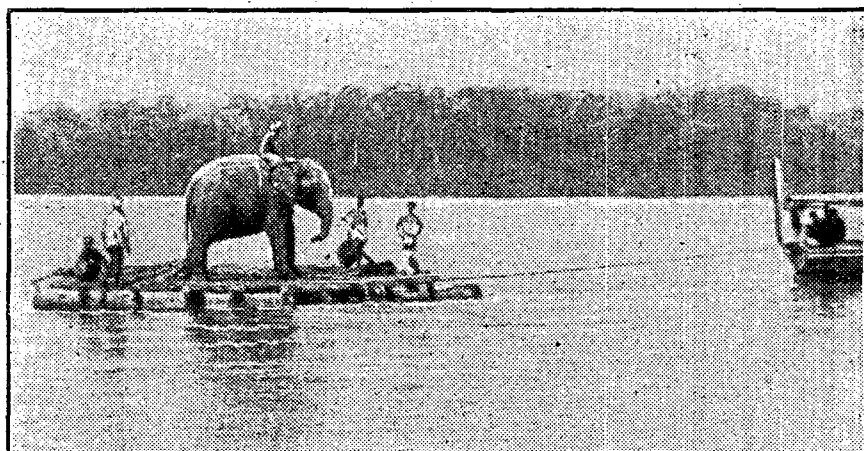
Restoring the Abbey — The outside of Henry VII's Chapel, Westminster Abbey, is being restored; and here we see a mason carving a replica of one of the damaged stones which has to be replaced



A Handful of Lambs — Shepherds everywhere are now very busy, and during a ride or walk through the country it is interesting everywhere to see the lambs gambolling with their mothers in the pastures. This photograph shows the King's shepherd at Sandringham with an armful of lambs a day or two old



A Sudden Tack on the Ice — Ice-yacht sailing is an exciting sport in America, and when the boat is tacked suddenly, as shown here, those on board must be experienced to keep their balance



An Elephant on a Raft — A team of working elephants was recently sent from India to the Andaman Islands, and on arriving each animal was unloaded from the ship on to a raft and towed ashore by a tug. They were let down from the ship by means of a crane



A Test Match in South Africa — The test matches in South Africa are creating great interest in cricket circles in both England and Africa; and in this photograph Macaulay is seen making the winning stroke for the M.C.C. in the second test match, which was played at Capetown

ALL THE WORLD LOVES THE C.N. MONTHLY. ASK FOR MY MAGAZINE. EDITED BY ARTHUR MEE

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